Reporting on our material themes

Information on all material themes can be found within our report and corporate website.

The top three overarching themes are covered across the entire report:

- Our comprehensive disclosures across this report and our corporate website provide leading levels of transparency, and our integrated reporting approach ensures all material matters, financial and sustainability-related, are covered together in an understandable way that represents the integral nature of sustainability to how we run our business and create value.
- Resilience is a key consideration in our planning, as set out on pages 32 to 33, including the very long-term approach we take and our adaptive planning approach. It is key to the way we manage our key resources, as set out on pages 20 to 23, and resilience in the round is the ultimate focus of our robust risk management procedures, as detailed on pages 51 to 56.
- The external environment in which we operate, including the political and regulatory environment and the developments around the price review and our AMP8 business plan submission, is covered on pages 24 to 27.

Matters of corporate governance and business conduct are dealt with in our corporate governance report on pages 99 to 163.

As set out in our business model on pages 18 to 19, we provide disclosures across the four pillars set out by the ISSB – strategy, governance, risk management, and metrics and targets. For each pillar, we set out general company information followed by information relating to our most material themes, i.e. the remaining themes that sit within the upper two segments of the matrix. These are split into the key elements of our purpose – greener (climate and nature-related), healthier and stronger. The 'greener' elements also cover our disclosure requirements under the TCFD (climate-related) and TNFD (nature-related), as shown on page 03.

Strategy
See pages 31 to 43

Governance
See pages 44 to 50

Risk management
See pages 51 to 62

Metrics and targets
See pages 63 to 67

General disclosure requirements of the TNFD

The Task Force on Nature-related Financial Disclosures (TNFD) framework recommendations include six general requirements that apply to all four pillars of recommended disclosures: strategy, governance, risk and impact management, and metrics and targets.

A. Application of materiality
Pages 28 to 29 set out our materiality assessment for disclosures, which includes nature and climate-related themes. The materiality of nature-related matters reflects the impact of the business and its activities across the value chain on the environment. Climate-related issues are quantified by the impact of highest assessed risks.

B. Scope of disclosures
Scope of the disclosure account covers activities and assets, impacted and dependent on by our direct operations; upstream value chain (materials and construction); and downstream value chain (water use and customer behaviour).

C. Location of nature-related issues
Our services are dependent on the extent and condition of catchment land, including but not limited to the 56,000 hectares of land that we own across the North West of England.

D. Integration with other sustainability-related disclosures
Our annual report has included climate-related financial disclosures (TCFD) since 2020 and we were an early adopter of nature-related financial disclosures (TNFD) in 2022. We also report on nature loss in the World Economic Forum (WEF) risk index.

E. Time horizons considered
As set out on pages 32 to 33, we plan over short, medium and long-term horizons:

Short term – up to one year

Medium term – up to 2030

Long term – beyond 2030, typically to 2050, 2080 or 2100

F. Engagement of Indigenous Peoples, local communities and affected stakeholders in the identification and assessment of the organisation's nature-related issues
As part of the AMP8 business plan we engaged with 95,000 customers to inform our decisions, with environmental issues at the heart of this research. Our five counties model has a key focus on stakeholder management, to strengthen relationships with local community groups in order to help us meet their needs.

Our strategic priorities help us to deliver our purpose

Each of our six priorities is linked to one of the key elements of our purpose – stronger, greener and healthier – and helps us to address material themes identified.

Last year we re-shaped our strategy into six priorities, reflecting the key long-term drivers of the business and the services that matter to stakeholders, alongside ongoing developments in the political and regulatory environment. We believe that focusing on these priorities will help enhance our resilience, and by setting out clear and actionable aims in this way, and monitoring our performance against them, we hope to improve trust and transparency. By focusing on long-term drivers, our strategy directly addresses the top three themes determined through our materiality assessment described on pages 28 to 29. Each of our six strategic priorities, as set out below, also addresses one or more of the material themes identified.

In this section you will find:

- Our strategic priorities
- Short, medium and long-term planning horizons
- Our strategy for managing climate-related risks and opportunities and our net zero transition plan
- Our strategy for managing nature-related risks and opportunities
- Our strategy for other risks and opportunities identified as material themes against the stronger and healthier elements of our purpose

Improve our rivers

We have a strong track record in minimising pollution, and continue to protect bathing waters across the North West. River health in the UK has grown in public interest in recent years. The industrial legacy and high rainfall in our region means we have a bigger task than many to deliver the significant reduction in spills from storm overflows required by the Environment Act 2021. This will form a significant component of our investment in AMP8, with £3.1 billion dedicated to it in our business plan, and we are accelerating part of this investment, with good progress already made.

Material themes addressed:
- River water quality and storm overflows

Read more on our accelerated solutions to improve river water quality on page 73

Deliver great service for all our customers

We strive to continually improve our service for customers – improving water quality, minimising interruptions, fixing leaks and reducing the risk of sewer flooding. Engagement helps us understand what matters most to customers – the stretching targets in our AMP8 business plan reflect views based on extensive engagement and this is reflected in strong levels of customer acceptability. Great service also means helping customers with affordability and vulnerability support, and keeping their data secure.

Material themes addressed:
- Customer service and operational performance
- Drinking water quality
- Affordability and vulnerability
- Data security

Spend customers' money wisely

We continuously challenge ourselves to improve cost efficiency in a sustainable way, so we can keep customer bills as low as possible in the long term without compromising on service or resilience. We look to minimise whole-life cost and deliver the best value solutions, using innovation to find better ways of working, raising efficient financing and managing risk prudently, leveraging partnerships and driving value in our supply chain, capitalising on digital and automation opportunities, and removing areas of duplication or waste.

Material themes addressed:
- Financial risk management
- Innovation
- Responsible supply chain

Create a greener future

We are committed to protecting nature and biodiversity, and reducing water consumption. We have a net zero transition plan underpinned by our six carbon pledges and ambitious science-based targets. We generate clean energy from bioresources and through partners. We are looking at how we can make the best use of our land to deliver a greener future, be that through our pledges to create woodland and restore peatland, or increasing our renewable energy generation capacity.

Material themes addressed:
- Climate change mitigation
- Water resources and leakage
- Natural capital and biodiversity
- Energy generation
- Waste management
- Air quality

Provide a safe and great place to work

We invest in our colleagues' training and development, and are dedicated to maintaining high levels of health, safety and wellbeing. We want to attract, develop and engage great talent across the organisation, we support and encourage a diverse and inclusive culture, and we want colleagues to be empowered to contribute to making things better. To facilitate this, our new 'Call it Out' initiative enables everyone to raise any topic or suggestion for improvement directly with the CEO, and all contacts receive a response within 48 hours.

Material themes addressed:
- Health, safety and wellbeing
- Diverse and skilled workforce
- Colleague engagement

Contribute to our communities

We work closely with communities across the North West and we invest in those communities as well as opening our land for access and recreation. We actively engage and make use of partnerships to drive value for communities, such as our participation in the Love Windermere initiative. We produced individual business plans for each of the North West's five counties, recognising their unique and diverse needs and challenges, and we have mobilised our teams into county delivery squads to help manage these relationships and ensure we can deliver our planned improvements for each county with minimal disruption.

Material themes addressed:
- Supporting our communities
- Land management, access and recreation

Our planning horizons

We plan for the short, medium and long term, using an adaptive planning approach, which helps to ensure we are delivering our purpose in a sustainable way.

1 year

Short-term planning

We set annual, measurable targets, but retain flexibility to enable us to respond to challenges that may arise.

Short-term planning helps us work towards our medium and long-term goals and provides us with measurable targets so we can continually monitor and assess our progress.

Before the start of each financial year, which runs from 1 April to 31 March, we develop a business plan that is reviewed and approved by the board. This sets our annual targets to deliver further improvements in service delivery, environmental targets and efficiency, helping us move closer to our longer-term goals.

Performance against these stretching targets determines the annual bonus percentage that is awarded to executive directors and all colleagues right through the organisation.

To avoid encouraging short-term decision-making and ensure management is focused on the long-term performance of the company, executive directors and senior leaders are also remunerated through a long-term incentive plan (LTP).

The LTP assesses three-year performance and includes return on regulated equity (RoRE) alongside a basket of customer and environmental measures, including carbon.

Read more about the annual bonus and LTP in our remuneration report on pages 140 to 163

Executive directors hold regular business review meetings with senior managers across the business to track progress against our annual targets.

It is vital that we retain flexibility within this short-term planning so we can adapt to meet challenges that may arise during each year while continuing to deliver resilient and high-quality services to customers in the most effective and cost-efficient way possible.

This may involve bringing enhancements forward to deliver improvements for customers early, investing further into the business to maintain service, or delaying projects to occur later in the regulatory period to prioritise expenditure and focus our time on dealing with unexpected challenges that may arise.

The extreme weather we have seen in recent years demonstrates how important it is that we retain this flexibility, as we are already experiencing the impacts of climate change and the challenges it brings.

Hot, dry summers can lead to drought triggers being crossed, while prolonged excessive periods of rainfall at other times heightens the risk of flooding, and rapid freeze-thaw events during winter cold snaps put enormous pressure on pipes leading to more likelihood of leaks and bursts. Our adaptive approach to planning positions us well to tackle these challenges.

up to 2030

Medium-term planning

Aligned to the commitments in our AMP7 final determination and our AMP8 business plan.

The majority of the group's activities sit in our regulated water and wastewater business – United Utilities Water Limited (UUW). Our medium-term planning mostly sets out how we will deliver against the commitments in the final determination published by Ofwat for UUW for each five-year asset management plan (AMP) period, and our plans for the next one. Our medium-term plans are also designed to help us work towards our long-term delivery strategy, which accompanied our AMP8 business plan submission, to build and maintain resilience, and help us fulfil our purpose.

To ensure we deliver for all stakeholders, including customer preferences and environmental requirements, we align our plans to these priorities in line with key published methodologies. We engage in extensive research to ensure our plans are robust and balanced, targeting the best overall outcomes for all our stakeholders. Following scrutiny and challenge from Ofwat, we receive the final determination, which sets the price (in terms of total expenditure recovered through customer bills), service level, and incentive package that we must deliver over the five-year period. This includes an expected return to meet financing costs.

Adaptive planning is important in meeting our medium-term targets in the most effective and efficient way. During the current 2020–25 period (AMP7), we have adapted our total expenditure (totex) in three ways.

First, we accelerated our capital programme, with around £500 million of totex brought forward over the first three years, delivering improvements early and making a strong start to our plans.

Second, we extended our totex by £765 million to deliver customer and environmental improvements, accelerating delivery of the Environment Act 2021 and improving performance against customer outcome delivery incentives (ODIs).

Third, we are accelerating around £400 million of AMP8 expenditure into the final two years of AMP7, helping us to speed up delivery of environmental commitments, improving river health and reducing the use of storm overflows.

Our strategy helps us create value for our stakeholders by delivering or outperforming the final determination. We publish an annual performance report (APR) in July of each year, which reports our performance in a format that is comparable across the sector. This includes return on regulated equity (RoRE), which comprises the base allowed return and any out/underperformance.

Our APR will be available at unitedutilities.com/corporate/about-us/performance/annual-performance-report

Information on companies' regulatory performance can be found at discoverwater.co.uk

up to 2100

Long-term planning

We plan far into the future, using adaptive planning pathways to ensure we can respond to risks and opportunities that may arise.

To maintain a reliable, high-quality service for customers long into the future, we need to anticipate and plan for things that may impact on our activities. To do this we monitor the age and health of our assets, keep track of innovations and advancements in technology, and look at current and predictive data from various sources to track key risk indicators. This includes long-term economic forecasts, population growth expectations, climate and weather predictions, and legal and regulatory consultations and changes. Depending on the context, long-term can mean 2050, 2100, or beyond.

We review this information as part of our long-term planning and risk management processes, through which we assess and manage opportunities and risks from climate change, population growth, increased market competition, water trading, more stringent environmental regulations, developments in technology, and combining affordable bills with a modern, responsive service.

Our website has a dedicated section where we examine key long-term challenges and how we will focus our resources and talents to meet them. You can find our:

- Drainage and Wastewater Management Plan – examining the risks around flooding, pollution, storm overflows, and wastewater treatment over a 25-year period;
- Water Resources Management Plan – setting out the investment needed to ensure we have sufficient water to continue supplying customers, taking into account the potential impacts of climate change, covering a 25-year period and considering consumption and climate forecasts out to 2080;
- Drought Plan – setting out the actions we will take to manage drought risk, updated every five years; and
- Adaptation progress reports – setting out the current and future predicted impacts of climate change on the business and our proposals for adapting to a changing climate.

Read about our future plans at unitedutilities.com/corporate/about-us/our-future-plans

Our long-term delivery strategy out to 2050 is embedded into our plans for AMP8. We use whole-life cost modelling and maintain a robust financing structure to ensure we can invest efficiently to meet our long-term plans.

Our training and development, graduate and apprenticeship programmes, and work with schools to encourage STEM careers, all help to ensure we retain the skills we need in the North West to continue delivering these plans.

Greener: climate

Climate strategy: How climate-related risks and opportunities impact the organisation's businesses, strategy and financial planning

TCFD strategy disclosures

a) The most material climate risks identified are listed below, including how they change over short (up to one year), medium (to 2030) and long-term (beyond 2030) horizons.

b) The changing rainfall patterns have a substantial impact on our strategic and financial planning across all areas of the organisation.

c) The climate has already changed and will continue to do so under all future projections. We are actively and adaptively planning for a wide range of likely climate scenarios.

Most material climate-related risks

Climate risks and opportunities are assessed using our planning horizons set on page 33. As our assets can, typically, have very long useful lifespans, our long-term horizons look further into the future than other organisations. Our specific assessment of climate risks is described in our adaptation progress reports, the latest of which is our 2021 Planning for Climate Change. Each climate risk is rated out of five for likelihood and for impact using our six capital value framework. The product of these ratings is a risk score out of 25. The table below summarises our most material, highest scoring risks (at April 2024) for each climate trend and also shows how scores are expected to change over the medium and long term.

Many of our highest scoring risks are acute and chronic physical risks associated with changing rainfall patterns and volumes. We are already experiencing increasingly frequent high volume rainfall events, which in turn exacerbate existing challenges such as sewer flooding, asset flooding and asset deterioration. This is why resilience and adaptation to climate change are material themes (see page 29) and why five of our top ten business risks are noted as vulnerable to climate change.

TCFD risk category

A Acute physical risks
C Chronic physical risks
T Transitional risks

Climate trend	Leading to	Horizon ST	Horizon MT	Horizon LT	Resulting in...
A Rain – short duration and high volume	Sewer capacity exceeded	●	●	●	Sewer flooding, pollution incidents, customer impact
	Flooded assets	●	●	●	Asset damage and service disruption
	Floods, accidents and landslips	◐	◐	◐	Disruption to transport and supply lines
	More spills from storm overflows	◐	●	●	Pollution and perception of pollution of rivers and bathing waters
	Wastewater treatment capacity exceeded	◐	●	●	Operating beyond effective parameters and permits
	More runoff from agricultural land	◐	◐	●	Raised nutrient loads in water sources
A Storm events	Increased volumes of calls reporting bursts and service disruption	○	◐	◐	Pressure on our emergency response
	Damage to infrastructure and access blocked	○	◐	◐	Issues for deliveries, maintenance and inspections
A Cold	Reduced effectiveness of biological processes	○	◐	◐	Ineffective wastewater treatment casing pollution
A Heat	Temperature inversions in reservoirs	○	◐	◐	Odour and taste changes
C Lower average rainfall	Reducing water resources	●	●	●	Supply interruptions and more supply restrictions
	Drying vegetation meaning more severe and frequent moorland/forestry fires	●	●	●	Loss or devaluation of assets and impact to catchment health, risking raw water quality
	Blockages in the sewage system due to low flows	◐	◐	●	Sewer flooding and pollution at next significant rainfall
	Highly concentrated shock loads when it next rains	◐	◐	●	Inadequate treatment and potential pollution events
C Warmer temperatures	More days of algal growth in reservoirs	◐	◐	◐	Raw water deterioration impacting water treatment
	More tourists in region and more use of United Utilities' land	◐	●	◐	Temporary population causing localised supply/demand issues and more damage to land and catchments
C Rain-prolonged	Sodden agricultural land	●	●	●	Adverse effect on supply and demand for recycling biosolids to land
	Increased use of rising mains (pumping)	◐	●	◐	Accelerated asset deterioration and consequent failures
C Rising sea level	Coastal tidal flooding	○	◐	◐	Problems with coastal discharges and asset failures
C Changing seasonality	Wet/dry cycles increasing soil movement causing pipe systems to move	◐	◐	●	Accelerated asset deterioration, leading to more fractures and consequential service disruption
	Increased liability risk from more flooding due to high rainfall and damage from wet/dry cycles	◐	◐	●	Increased insurance premiums
T Changing expectations	Higher climate change mitigation expectations	◐	●	◐	Demand for transition planning activities
T Technology	Decarbonisation of the UK electricity grid	○	●	◐	Unstable grid more commonplace
T Policy and legal	Legislation, taxation, standard practice and decarbonisation targets	○	◐	◐	Drive to invest in new assets, infrastructure and training and also higher energy costs and greater regulatory duties
T Market	Increased abstraction by other catchment users e.g. for agriculture and horticulture	○	○	○	Pressure on water resources

Key: Risk scores at 2025, 2030 and 2050 ○ Low risk: score less than 10 ◐ Medium risk: score 10 to 12 ● High risk: score greater than 12

Impacts of climate-related risks

The chart below shows the current profile of the 72 climate-related risks at April 2024. As weather directly and indirectly constrains our ability to deliver our services it is not surprising that the vast majority (90 per cent) of our climate-related risks are physical risks. Some risks impact single business areas, others are business wide and we also have risks from interdependencies with other parties across the North West.

Urban rainfall in the North West is already 40 per cent higher than the industry average, which means more rainwater needs draining compared to other areas. Increasing rainfall with climate change, together with our higher proportion of combined sewers, (54 per cent of our sewers compared to 33 per cent across England) will put more pressure on our network and treatment infrastructure and result in greater risks of sewer flooding and storm overflows.

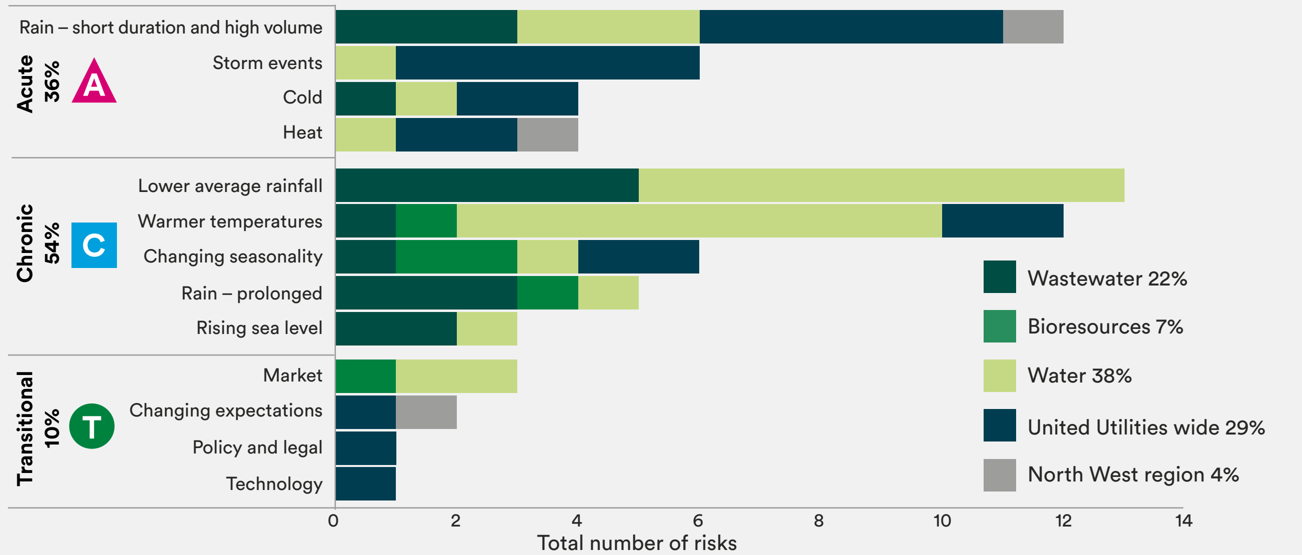
We manage 162 water reservoirs in the UK with around 93 per cent of our water sourced from surface water – lakes, reservoirs and rivers, rather than groundwater or aquifers. This means changing rainfall patterns also have a significant impact on our water operations. Projected warmer and drier weather will result in lower summer reservoir levels and greater drought risk, while higher frequency of short intense storms forecasted will increase soil erosion and movements in turn deteriorate or contaminate potable water sources.

The physical impacts of the climate risks have been quantified using predictions of weather metrics like wind, temperature, and rainfall from the highly respected and relevant Met Office UK Climate Projections 2018 (UKCP18). These projections are categorised by a Representative Concentration Pathways (RCP) with each RCP associated with a predicted level of future greenhouse gases relative to pre-industrial levels. Our third climate change risk assessment used the Met Office climate projections at a regional level for the representative concentration pathway, RCP 6.0, which has an emissions peak occurring in 2080 and an expected 3.0–3.5°C increase in global mean temperatures from pre-industrial levels. We chose this as it is widely recognised to be the most likely pathway that supports effective planning. Our future assessments will use RCP 2.6 and RCP 8.5 to understand a wider range of outcomes and will further differentiate at a sub-regional county level to recognise the differences in both weather and impact with geography. For instance, a drought in Cumbria is a more material risk to our operations than one in Manchester. This development will enable us to develop more local asset-specific response plans.

To convert GHG emissions into financial impacts, such as to quantify the transitional risks, we have used the carbon values for use in policy appraisal, (£ per tCO_2e) of the relevant time period, provided by the UK Government.

Climate-related risks by climate trend and impacted business area/location

Climate trends are grouped by TCFD risk category. Percentages are out of 72 risks in the climate risk register at April 2024.



Including the climate change impacts in our strategies

Predicting the effects of climate change is multifaceted and complex. There is considerable uncertainty about how our processes, people and infrastructure will respond to the challenges of both climate and demographic changes.

Our public Water Resources Management Plan (WRMP), Water Quality Plan (WQP) and Drainage and Wastewater Management Plan (DWMP) are examples of where we use advanced modelling with climate change scenarios to shape our financial plans for the long term, while staying aligned with our short-term needs. In these plans we describe how we have used sophisticated models to predict and test how resilient our services would be against potential future demands including population growth and movement, economic trends and patterns of water use.

It is becoming increasingly vital in climate change adaptation planning to test scenarios with compound physical impacts. This is when multiple extreme weather events occur in a short time frame. We stress test our plans by building weather scenarios that combine together worst examples of weather that we have experienced. An example of this is how our assets and systems would cope with consecutive hot dry summers like 2020 and 2021 with a dry winter like 1984 in between.

We also try to model compound benefits where a single intervention might have multiple benefits. For instance, sustainable drainage systems (SuDS) slow down or divert rainwater runoff, which optimises use of wastewater treatment capacity and also provides an opportunity to deliver wider social value in the community and local environment.

Greener: climate

Climate strategy: How climate-related risks and opportunities impact the organisation's businesses, strategy and financial planning continued

Building resilience through adaptive planning

In developing our long-term strategic and financial plans, and seeking customer feedback on those proposals, we have used various scenarios encompassing wide ranges of environmental, regulatory, technological and societal possibilities.

In the last year we have built on our track record of effective long-term planning and combined those plans with our approach to asset management, which has been certified to ISO55001:2014, into an iterative, adaptive approach; our long-term delivery strategy (LTDS). An adaptive approach, using scenario analysis, means our LTDS prioritises problems with evidence of impact, such as the most material climate risks, while monitoring remaining uncertainties. This means we can choose the appropriate timing and approach for investment as climate science and technology advances, as legislation develops and as our customer and stakeholder expectations evolve. This approach helped us to build an investment plan with a low and no regrets approach in the core pathway for each area, while retaining flexibility, where there is uncertainty, via the alternative pathways. See example below.

Climate change presents a systemic and often compounding risk throughout our operations and services, with varying vulnerabilities dependent on the geographies and asset mix. We have assessed our operational resilience across a range of credible climate change scenarios; benign (low) aligned to RCP 2.6, adverse (high) aligned to the RCP 8.5 and where helpful a central pathway aligned to RCP 6.0. It has become apparent that RCP 2.6 (well below 2°C of warming) is no longer credible and that planning for this pathway would likely see the UK water sector ill-prepared for the future. It is important we plan for a plausible future, therefore, we have chosen the central RCP 6.0 projections for our core pathway investment plans to balance cost efficiency and physical resilience.

As well as considering physical risk scenarios, we have assessed potential impacts on our GHG emissions from our water, wastewater and bioresources core and adaptive plans. We have prioritised water efficiency in our plans so that we can extend services to meet the needs of the growing population, while minimising pressure on water sources and investments and protecting rivers over the medium and long term. These priorities pose substantial growth pressures in both embodied and operational emissions. Our plan strives to keep us on track to achieve our near-term targets, but to maintain a science-based trajectory to net zero 2050 will need transformational innovation and investment for GHG emissions reduction as a primary driver, and also the full valuation of GHG emissions throughout national policy frameworks.

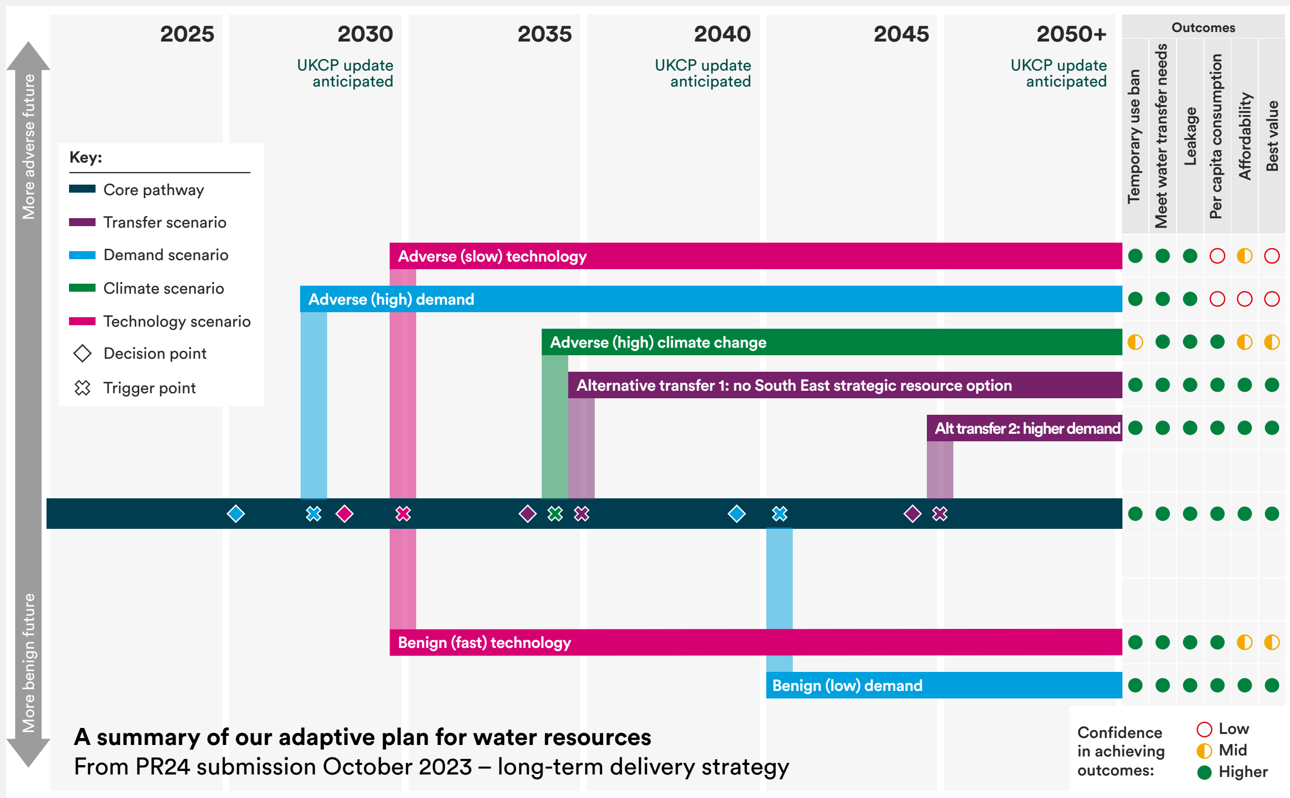
Read our three adaptation progress reports on our website at unitedutilities.com/corporate/responsibility/environment/climate-change

Read our long-term delivery strategy and our approach to operational resilience and asset health at unitedutilities.com/corporate/about-us/our-future-plans

Read our net zero transition plan on pages 37 to 39

An adaptive plan example with core and alternative pathways

We have developed strategic adaptive plans for water, wastewater and bioresources operations and tested each of these plans against multiple scenarios. We used scenarios for climate change, demand, reduced abstraction, technology, water transfers and changing expectations. Each adaptive plan, therefore, has one core pathway and alternative pathways, defined by decision or trigger points where alternative investment/development paths diverge. The confidence in achieving key outcomes is estimated for each pathway.



A summary of our adaptive plan for water resources
From PR24 submission October 2023 – long-term delivery strategy

Greener: climate

Our net zero transition plan

Our transition plan to contribute to, and prepare for, a rapid global transition towards a low-emission economy is based on our established climate change mitigation strategy. This has four components: vision and visibility; ambition and commitment; demonstrating action; and beyond here and now. Between them, these define our principles, priorities and implementation approach.

Vision and visibility

Demonstrating integrity and leadership in carbon reporting and disclosure.

Vision and visibility are the foundations of our climate change mitigation strategy and thus our net zero transition plan. We are dedicated to understanding how every aspect of our operations contributes to our emissions. Our aspiration is to ensure we consider the climate in all operational and strategic decision-making, influencing strategy and behaviours by including emissions management in remuneration schemes and including government carbon values into our best value framework used for decision-making.

We are committed to reporting in an open and transparent way, aiming to be recognised as among the best in the UK. We have a strong track record of sustainability reporting, having disclosed our verified GHG emissions since 2008. We publish our GHG emissions and underlying energy use in our annual report as required under the Companies Act 2006 and follow the 2019 UK Government Environmental Reporting Guidelines: including streamlined energy and carbon reporting guidance. Our reporting is supported by robust governance and accountability mechanisms. Our greenhouse gas inventory has undergone independent, third-party verification by Achilles Group, confirming our reporting is compliant with the international carbon reporting standard (ISO 14064) and certified as compliant with the CarbonReduce programme.

We have responded to the CDP climate change questionnaire since 2010 and use this as our benchmark of leadership. We were proud that our 2023 response was rated as A-, maintaining our position in the leadership category.

Ambition and commitment

Playing our part to mitigate climate change and lower our greenhouse gas emissions to help make the North West a better place to live now and in the future.

An important element of our approach is to demonstrate our ambition and encourage others to contribute by making public commitments.

In 2020 we made six carbon pledges and we are making good progress to deliver these. See page 74 for more details. Central to our pledges was to set science-based targets for all emission scopes. United Utilities is proud to be the first UK water company to have had near-term targets approved by the Science Based Targets initiative (SBTi), a collaboration that defines and promotes global best practice in science-based target setting. Our four targets cover all three emission scopes and the scope 1 and 2 emissions reduction target is consistent with the 1.5° ambition of the Paris Agreement. We plan to review, and if needed, revise our near-term science-based targets as per SBTi guidance and in line with our next business planning period.

The SBTi Corporate Net-Zero Standard was launched in late 2021 and reinforcing our support to the Business Ambition for 1.5°C campaign, we submitted our long-term target and commitment to net zero for validation in January 2024.

Demonstrating action

Reducing our environmental impacts through delivery of transformational strategies and culture change.

Our action plan to achieve the long-term ambition of net zero by 2050 (in line with climate science and the UK Government targets) is set out on the next page. We are already working on, and delivering on, actions in all themes to:

- **Reduce** through the efficient use of resources;
- **Replace** processes and resources with more sustainable alternatives;
- **Remove** GHGs from the atmosphere;
- **Collaborate** to tackle emissions in the supply chain; and
- **Innovate** to address current technological or market gaps.

Our priority in the medium term will be to reduce our absolute emissions through these actions before we use carbon units or purchase any credits to offset the residual emissions to net zero.

Beyond here and now

Innovating across processes, technology and culture.

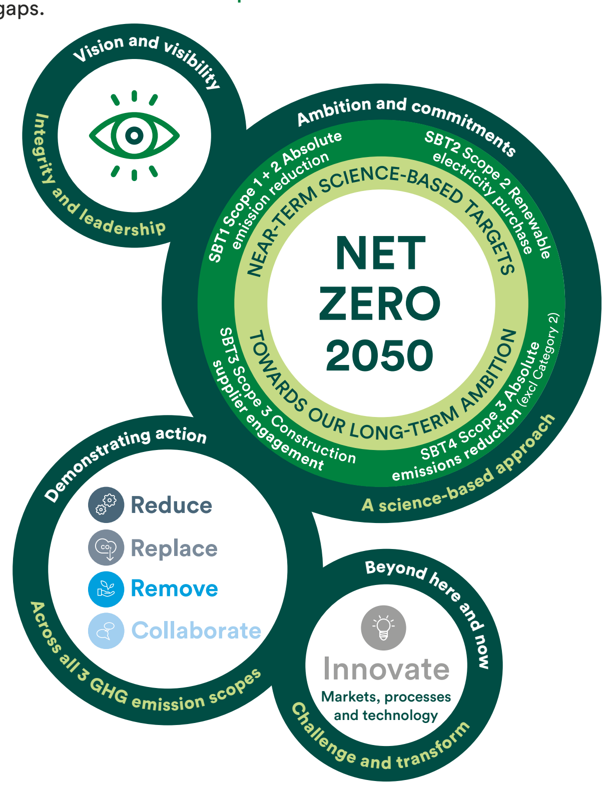
Our strategy pillar of 'beyond here and now' encourages us to reflect on the challenge to influence emissions beyond our current inventory and existing capabilities. To deliver our net zero transition plan we will challenge standards and engage with industry peers, our supply chain, and other partners to develop markets, technologies and practices to reduce or mitigate future emissions.

We co-chair the Water UK carbon network and are part of a team who lead net zero research across the industry, for instance exploring and testing what operational interventions can be made to reduce process emissions. We have also facilitated a water industry task and finish project to understand and quantify the GHG emissions related to chemicals use.

An example of working with our supply chain is our Innovation Lab, which is an annual 14-week programme that provides successful applicants opportunities to test their solutions to our business challenges. The programme is designed to 'look for ideas where others aren't looking' – in other sectors, other countries and with suppliers that are often small, start-up businesses, just starting on their idea development or business growth journey. Our most recent programme included teams developing technology to capture methane and testing sustainable concrete incorporating graphene.

A further example of evolving our practice and delivering outcomes in partnership is our procurement for AMP8 programme partners. All the tenders have included assessment of suppliers' measurement, management and reduction of GHG emissions and have favoured those with a robust and science-based approach.

Read more about how we are using innovation to tackle the sustainability challenges, at unitedutilities.com/corporate/about-us/innovation



Greener: climate

Our net zero transition plan continued

Transition plan, policies and principles

Our transition plan is ambitious and adaptive, aiming to achieve net zero (as defined by the SBTi Net-Zero Standard) across all three emissions scopes by 2050. We have already substantially reduced our GHG emissions since 2006 through energy efficiency initiatives and our move to use renewable electricity either generated on-site or purchased with energy attribute certificates. The next priority is to further reduce absolute emissions through cost-effective and technically feasible activities that minimise our use of GHG intensive energy and materials. Subsequent activities will enable future reductions by working with our supply chain and other partners to make the most of emerging markets, cultivate sustainable practice and to foster innovation to address technological gaps.

We will go beyond emissions reductions and enable, encourage and reward interventions that protect and enhance the natural environment, while promoting the value of wider ecosystem services across our sphere of influence. This will include promoting sustainable use of natural resources, and increased application of the waste hierarchy and circular economy principles in our operational activities and infrastructure programmes.

In spite of our best intentions, it will not be possible to eliminate emissions from the biological treatment of wastewater. To compensate for this we are implementing programmes that will remove and store carbon dioxide from the atmosphere through peatland restoration and woodland creation. United Utilities intends to use the carbon units issued to inset against our residual GHG emissions. Units will be retired from the UK Land Registry and reported in the energy and carbon report within our annual report for the relevant financial year. We may purchase additional carbon credits as we approach 2050 to offset residual emissions and achieve net zero.

As a regulated service provider and infrastructure operator, there are risks to the success of our transition plan that are outside of control. Our ability and approach to net zero is ultimately governed by national policy frameworks and legislative duties, such as the new Environment Act, that determine both the emissions growth pressures we need to counteract and the level of investment we can allocate to emissions reductions. Our transition plan, therefore, also includes engagement activities with regulators and government to inform effective policy that fully values GHG emissions to support sustainable development in the round.

Scope 1 – Decarbonising activities we own or control

Wastewater and sludge processes cause approximately 70 per cent of our scope 1 emissions as the gases released, nitrous oxide (N_2O) and methane (CH_4), have much greater global warming potentials than carbon dioxide (CO_2). Our process emissions are currently estimated as a direct function of the population whose sewage we treat. This means that, even if we achieve a 100 per cent green fleet and eradicate all fossil fuel use, along with the global water industry, we still have the gigantic challenge of process emissions to tackle.

Scope 2 – Decarbonising electricity and heat purchased

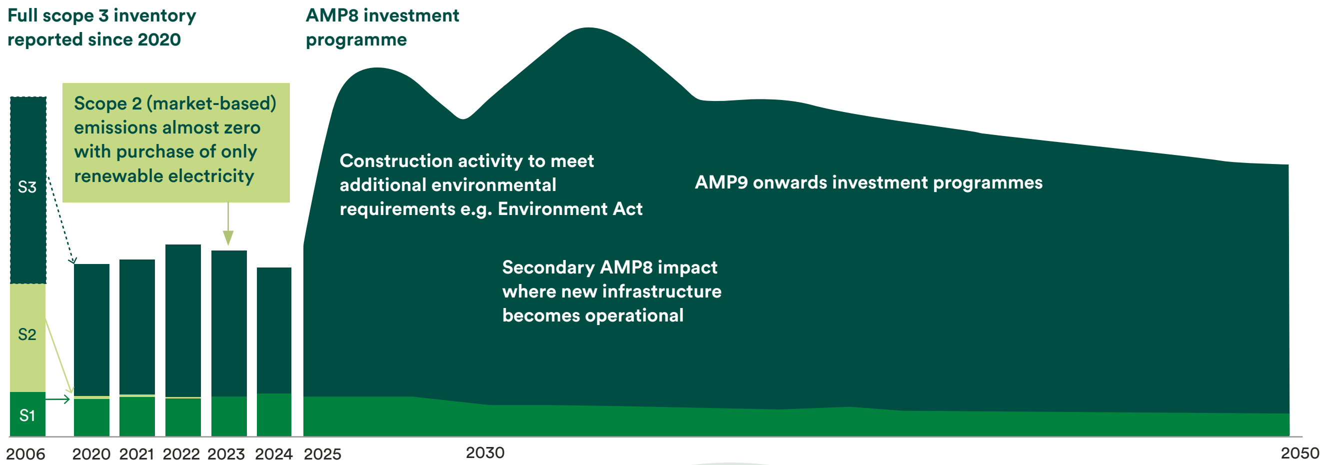
Our scope 2 emissions have reduced since we began to measure them in 2005/06 from 360 ktCO_2e to 261 ktCO_2e (location-based) and almost zero (market-based). This is a combination of the decarbonisation of the UK grid, restraining our energy use in the face of substantial growth pressures and our policy to buy REGO backed renewable electricity. In the medium term we intend to substantially increase our self generation capability to mitigate risk of increased REGO prices and build energy resilience by using our land for renewables and other clean technologies.

Scope 3 – Contributing to an economy-wide transition

Our largest source of scope 3 emissions are from construction and network maintenance activities. This means if our infrastructure development activity increases, for instance as a result of a prescribed environmental programme as is expected for AMPs 8 and 9, then our emissions will also substantially increase. We aim to mitigate this by the use of nature-based solutions and low-carbon material replacements. This contributes to the technological and a market readiness needed to embed and accelerate a transition to a low GHG emissions and climate resilient economy.

Our emissions challenge – growth from environmental obligations, population and climate change

Our total emissions have reduced over the last three years but our long-term emissions forecast in the October 2023 business plan shows the scale of our emissions challenge ahead. We anticipate significant growth from the investments required to address population increases, to adapt our assets and infrastructure for climate change as well as additional legal and regulatory requirements to protect the water environment.

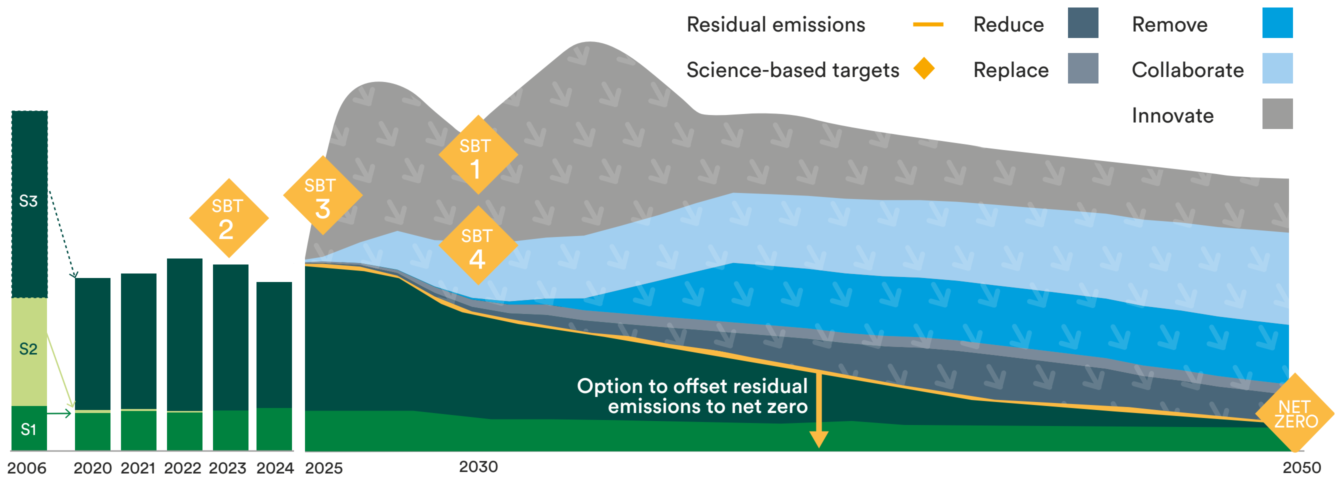


Action plan	Short term including recent progress	Medium term up to 2030	Long term to 2050 and beyond
Reduce consumption by careful use of resources.	• Colleague campaign 'Use Less, Save More' • Achieved ambitious targets for percentage of waste to beneficial reuse	• Optimise wastewater processes for GHG • Sensitive delivery of environment improvement programmes	• Identify and implement further efficiency opportunities • Reduce use of carbon intensive materials and techniques
Replace processes and resources with more sustainable alternatives.	◆ Renewable electricity sourcing • Substantial renewable energy generation capacity and capability • 60%+ sludge processing by lower GHG advanced digestion • Electric vehicle infrastructure	• Grow further renewables capabilities and capacity • Bioresources planning and investment to increase sludge processing capacity ◆ Electric vehicles rollout and trials for HGVs	• Eradicate use of fossil fuels, e.g. use hydrogen to fuel HGVs • Nutrient recovery initiatives • Continual stretch for sustainability informed by latest innovations
Remove GHGs from the atmosphere.	• Woodland creation – planning and first schemes planted and registered • Peatland restoration – schemes started	◆ 550ha woodland creation ◆ 1000ha peatland restoration	• Ongoing benefits of restored peatland • Benefits from growth of new woodlands • Carbon capture, use and storage
Collaborate to tackle emissions in the supply chain.	• Led water industry on task and finish group on chemicals and GHGs • Climate-related criteria in AMP8 delivery partner selection ◆ Encourage capital delivery partners to set SBTs	• Influence national approach to water environment improvements • Sustainability performance indicators for suppliers • Quantify more scope 3 emissions using product and activity data	• Collaborate to decarbonise our infrastructure programmes and wider supply chain • Drive standards reform to enable use of low emission materials and techniques • Offset residual emissions
Innovate to address current technological or market gaps.	• Carbon categories in United Utilities Innovation Labs • CEO Challenge improvement projects on energy and carbon • Identification of future research and innovation needs • Support regional transition via membership of Net Zero North West	• Explore low-carbon capital delivery options, e.g. nature-based solutions and low-carbon concrete • Process emissions monitoring • Nutrient recovery research • Research to support net zero treatment works and communities	• Transformation in water and wastewater processing towards net zero treatment works • Application of circular economy principles across the business • Utilise emerging Environment Attribute Certificates schemes

◆ Actions that directly link to our six carbon pledges or near-term science-based targets. For current progress on pledges see page 74.

Our route to net zero – adopting a science-based approach

The graph below shows how we are planning for emissions growth to be managed using the five themes of our transition plan. The depth of each layer relates to the GHG emissions that might be avoided by interventions such as those outlined above. Having already taken the most commercially attractive options costs, complexity and uncertainty will increase in the medium to long term, hopefully mitigated by advances achieved through collaboration and innovation.



Greener: nature

How nature influences our approach

TNFD strategy disclosures

a) The most material nature-related dependencies, impacts, risks and opportunities are listed below.

b) The effects of our direct operations on nature are broad and complex, we continue to invest to protect the environment.

c) Our long-term adaptive plans support investment in the resilience of the ecosystems we depend on.

d) We consider nature-related matters at our priority locations and sites under designation.

Impacts and dependencies

Protecting and enhancing the natural environment is at the heart of our purpose and strategy. Providing great water for a greener North West means we protect and enhance the natural environment and adapt to the challenges of climate change, allowing people, wildlife and nature to thrive. Our strategic priorities to 'create a greener future' and 'improve our rivers' drive us to go above and beyond our regulatory requirements to maximise value for the environment. We aim to protect and enhance the natural environment by investing in our assets, driving performance improvements, adopting best asset management practices, and investing in nature-based solutions. Our environmental policy is underpinned by a framework of strategies and long-term plans in response to nature-related risks and opportunities. We are highly dependent on nature, with potential for material positive and negative impacts. The table below highlights some of the most material ways we rely and impact on nature. We manage these impacts and dependencies by creating long-term adaptive plans that support investment in the resilience of the ecosystems we depend on. Through adaptive planning, horizon scanning and natural capital accounting, we have identified the most material nature-related impacts and dependencies in our direct operations, upstream and downstream from our value chains. Our impact and dependency pathways are reflected on pages 22 to 23, where we describe how we manage natural capital and the water cycle from collection and treatment of freshwater through to removal, cleaning, and returning used water to nature.

Biome	We depend/rely on it	We can impact on it
Freshwater	• To source clean water from reservoirs, rivers, and boreholes, from which abstraction licences permit us to take water to be treated and supplied to customers. • To receive cleaned wastewater back into the environment.	• By improving the condition of rivers and water bodies. • Through our abstractions, final effluent quality, overflows, pollution incidents, and asset failure. • By cleaning our waterways through our River Rangers and volunteer activities.
Land	• To store and clean sources of water. • To recycle biosolids, to site engineered or nature-based interventions, and to attenuate water flows. • To provide resources, such as chemicals, cement, metals and energy.	• By improving the condition of the land we are stewards of, including improving habitat health and biodiversity. • By storing greenhouse gases (GHGs) in our land, e.g. soils, peatland, and woodland.
Atmosphere	• To provide a healthy and safe work environment. • For temperature regulation. • To reduce our fossil fuel consumption through wind power.	• By releasing GHG emissions, and other atmospheric pollutants, thereby contributing to climate change and impacting the health of people and nature.

Natural capital and biodiversity

Our interface with sensitive and priority locations

Natural capital has been a key element in our strategy and decision-making, from developing our 'enhancing natural capital value for customers' performance commitment in AMP7 to our approach to value-based decision-making in our AMP8 business plan, incorporating environmental metrics. In 2023, we completed our second corporate natural capital account to assess and value the benefits of our land holdings. Much of the land that we own is designated as Sites of Special Scientific Interest (SSSIs), which indicates the importance of the habitat for biodiversity. 91 per cent of SSSIs on our land now meet 'favourable' or 'unfavourable (recovering condition)' status, in part because we pioneered the use of nature-based solutions to address raw water quality when we started our sustainable catchment management programme (SCaMP) in 2005. We recognise our role as stewards of our land and make decisions based on the benefits and impacts our operations have on the natural environment and the value we can create for customers, society and the environment.

Our corporate natural capital account highlighted the importance of understanding our relationship with nature. For example, the land we own provides significant benefit to communities by providing natural open spaces for access and recreation, valued at £2.3 billion modelled over 60 years. Over 83 per cent of our land is within our water catchments and over 75 per cent of our land is under a form of statutory designation. The next step in monitoring and reviewing our relationship with nature is to determine the natural capital risk and impact our operations have on land we own. As part of our land review process, we are looking at the total value each parcel of our land provides for us, customers and the wider population of the North West, helping us better prioritise our future investment.

Our land under statutory designations

Designation	Area
Sites of Special Scientific Interest	22,500ha
Area of RAMSAR	1ha
Special Area of Conservation	11,000ha
Special Protected Area for Birds	14,000ha
Area within National Parks	26,000ha
Area of Outstanding Natural Beauty	11,000ha

Opportunities for nature improvement

Storm overflows and river water quality

In our AMP8 business plan we are proposing to invest £3.1 billion to reduce spills from more than 400 overflows, and protect and enhance over 500 kilometres of rivers, proposing to spend more than £900 million to reduce nutrients in final effluent. To maximise the societal benefits of the storm overflow discharge reduction plan, we have proposed to accelerate the delivery of the rainwater management element to maximise value for society and the environment. Taking advantage of the adaptive approach to the long-term targets, we are prioritising addressing overflows with proven harm, either through integrated catchment modelling or ecological surveys, to maximise benefits to customers and the environment.

Water resources and leakage

Our water resources and leakage long-term plans are set out in our Water Resources Management Plan (WRMP24). This plan sets out our approach to supply, demand, and drought scenario planning, ensuring long-term resilience of water supplies for the North West. Our plans to reduce demand, through reducing leaks and promoting more efficient use of water supported by smart metering, will allow us to halve the likelihood of a temporary use ban. Our demand reduction options detail our plans to achieve our long-term commitment of reducing leakage by 50 per cent by 2050, relative to the 2017/18 baseline.

Place based planning

Our place-based planning approach enables us and our partners to align and join up projects with the aim of unlocking shared funding and resources to deliver multiple environmental improvements across the region. It helps us to identify catchment and nature-based solutions and allows us to engage with potential partners much earlier to increase the likelihood of accessing co-funding and investment.

Upstream

We collaborate with our supply chain through our United Supply Chain approach, underpinned by our responsible sourcing principles (RSP) which set out our ambitions across a range of environmental, social and governance matters. As a signatory to our RSP, suppliers commit to developing their own supply chain by sharing resources, training, and upskilling their colleagues, whilst working with United Utilities to assure this approach by identifying and mitigating risk. As a leader against our RSP, suppliers commit to go further by demonstrating their commitment to the principles, collaborating with us in improving practice and identifying new ways of working to enhance the value delivered to customers.

Downstream

We have many schemes and strategies in place to support customers in considering their water use at home or at work, helping to reduce the demand for abstraction. Our 'what not to flush' campaigns support the reduction in blockages in sewers. They provide information illustrating how pouring fats, oils and grease down the sink and flushing wet wipes, period products or other bathroom rubbish down the toilet can lead to damage not only to customers' homes but also to the environment. A build-up of flushed products and fats, oils and grease can create fatbergs, which restrict the flow of wastewater through the sewer network and reduce the capacity of the sewers. This can lead to an increased risk of spills from storm overflows and the potential to cause pollution.

Risk key: A Physical Acute; C Physical Chronic; T Transitional

Biome	Risk	Material risks
Physical		
Freshwater	A	• Lack of ecosystem resilience, leading to damage to assets and infrastructure from adverse climate-related events.
	C	• Reduced raw water quality, leading to increased treatment burden. • Runoff from agriculture, leading to increased difficulty of meeting river water quality targets. • Reduced raw water availability, leading to more frequent drought risk.
Land	A	• Fire events in the catchment, leading to catastrophic impact on peatlands and water quality.
	C	• Reduced natural flood management, leading to more engineered interventions or more instances of flooding. • Increase in invasive non-native species, leading to reduced ecosystem resilience and impact on water treatment and flood management. • Landscape change, leading to reduced ecosystem resilience and impact on water treatment and flood management. • Increased risk of landslides, leading to disruption at our operational sites.
Atmosphere	C	• Reduced air quality ecosystem regulation, leading to worse impacts on customers, colleagues and society from our operations. • Reduced wind ecosystem regulation, leading to physical impacts at our sites or infrastructure.
Transitional	T	• Increasing pace of change towards a nature-positive economy, leading to difficulty in attracting finance. • Evolving expectations and requirements on reporting, leading to additional resources needed. • Existing technology is not fit for requirements or outpaces natural replacement rates, leading to additional investment requirements.

Material opportunities	
Sustainable and efficient use of resources	• Adoption of nature-based solutions such as sustainable drainage systems (SuDS), catchment interventions, and natural flood management. • Application of circular economy principles to design out waste, circulate products and materials, and regenerate nature. • Prioritisation of a best value approach that maximises value to customers, society and the environment at an efficient cost. • Transition to processes with lower negative impacts on nature and/or increased positive impacts on nature, including reducing resource extraction.
Markets	• Delivery of broader impacts through partnership working and collaborative approaches, such as the Integrated Water Management Plan in Greater Manchester, as discussed on page 86. • Access to new and emerging markets, such as renewables and carbon/biodiversity markets.
Capital flow and financing	• Access to nature-related green funds, bonds or loans, for example through our sustainable finance framework. • Use of financial incentives for suppliers to improve nature and ecosystem management. • Improved performance against regulatory objectives.
Social capital and trust	• Collaborative engagement with stakeholders. • Actions that create positive changes in sentiment towards United Utilities due to impacts on environmental assets and ecosystem services that have impacts on society.
Ecosystem protection, restoration, and regeneration	• Direct and indirect restoration, conservation or protection of ecosystems or habitats. For example, improving peatland, woodland and other SSSIs. • Protection and conservation of native threatened species and management of invasive non-native species. • Investment in blue-green and traditional infrastructure for nature-positive outcomes.

Healthier — Impact of material themes on our approach to creating a healthier North West

Customer service and operational performance, including drinking water quality

Providing great water is the building block of our purpose, and providing great service for all our customers is one of our six strategic priorities. This is, therefore, fundamental to our overarching business strategy and all our day-to-day activities.

Our Water Quality First initiative was awarded Drinking Water Initiative of the Year in the 2023 Water Industry Awards. This programme has achieved a significant reduction in discolouration, and our improvement has been recognised by the Drinking Water Inspectorate (DWI). We continue to drive forward with this important strategy, ensuring everyone right across the business, and including our supply chain, understands the role they can play in improving water quality and embedding this as part of our culture.

Our AMP8 business plan sets out the basis of our strategic plans to improve customer service and operational performance in the medium term, with stretching targets demonstrating our ambition to continuously improve, including:

- improving water quality for 1.4 million customers;
- safeguarding water supplies for over two million customers; and
- replacing lead pipes at 30,000 homes.

Affordability and vulnerability

Our approach is based on delivering industry-leading affordability and vulnerability support to customers, with a wide range of affordability schemes supporting around 375,000 customers so far in AMP7 and over 400,000 customers signed up to our Priority Services Register.

With bills anticipated to rise in AMP8 to support the necessary step up in investment, our business plan proposes doubling our affordability support to £525 million, which would see us helping one in six customers across the North West.

We use a variety of methods to help customers access the best schemes for them, including door-to-door affordability visits. We pioneer cross-sector collaborative approaches through our annual affordability summits and the Hardship Hub platform, which we developed to help debt advisers access all the help that is available across multiple sectors in one easily accessible place. We have been strong supporters of the call for a National Social Tariff, which would share the support that is available more fairly across the country to ensure the most vulnerable are able to access the support they need, regardless of where they live.

We hosted our second annual vulnerability summit in June 2023, bringing together professional representatives working with vulnerabilities to discuss how best we can all support people in the North West living with additional needs and the people that care for them.

Health, safety and wellbeing

The importance of this to our business is reflected in our strategic priority to provide a safe and great place to work.

It is a top priority everyone working for us or on our behalf gets home safe and well, and we actively work to support and improve the wellbeing of our colleagues.

Key to ensuring everyone goes home safe and well is making sure all colleagues are trained to do their role safely. That is why this year we have introduced an important incentive that links essential training to bonus payments, meaning all colleagues must remain up to date on their essential training to qualify for payment of their annual bonus.

We have also introduced new wellbeing benefits including a free virtual GP service, enhanced gym offerings, and a menopause support app. We are focused on mental, as well as physical, health. We have trained mental health first aiders across the business, an employee assistance programme where colleagues can access talking therapy, and we actively promote mental health conversations and support services such as Andy's Man Club.

We have been recognised for our focus on health, safety and wellbeing and awarded the RoSPA gold award for the 12th consecutive year and the National Workplace Wellbeing Charter, demonstrating our commitment to proactively championing a safe and healthy workplace.

Diverse and skilled workforce

As well as protecting the health, safety and wellbeing of our colleagues, our strategic priority to provide a safe and great place to work is also about providing an environment that actively promotes and celebrates equity, diversity and inclusion, and that continuously trains and develops colleagues to ensure we have the skills to keep delivering a great service for customers long into the future.

We are focused on training and development opportunities and were awarded Water Industry Skills Employer of the Year 2023, with the judge recognising us as a company that visibly attracts, develops and retains talent. We provide ongoing training and development for colleagues relevant to their role, as well as regular training that applies to all roles across the business.

We continue to invest in our training facilities across the region and in our digital training platforms to promote accessibility and meet a diverse range of learner requirements.

We've invested in further improvements at our Bolton training centre this year and, in order to improve accessibility of training, we have also expanded our training facilities. We now offer more training outside of our recognised training centres at Bolton and Leigh, with practical facilities for electrical, mechanical and health and safety training in a satellite site at one of our treatment works in Carlisle.

We continue to recruit and train new talent through our award-winning graduate and apprentice programmes. We welcomed more than 80 new graduates and apprentices in our 2023 intake with a breadth of diversity, with the introduction of a new pastoral support recognising our increasingly diverse apprentice programme. We have launched our largest ever apprenticeship recruitment process with more than 90 new opportunities available in 2024.

We want our workforce to reflect the local communities we serve, with all colleagues feeling welcomed, valued and included, regardless of their gender, age, race, disability, sexuality or social background. It is important that everyone feels they can bring their whole selves to work without the fear of being excluded.

Our equity, diversity and inclusion plan sets out our strategy and targets. We have five strategic workstreams, each of which plays an integral part in our journey towards our equity, diversity and inclusion commitments for 2030, as set out on page 67:

1. Leadership development – support leaders to drive inclusion across our business;
2. Encourage openness – encourage colleagues to share and take action;
3. Reset and refresh – weave equity, diversity and inclusion into everything we do;
4. Bring the outside in – educate and raise awareness of inclusion; and
5. Amplify our colleagues' voices – provide a safe space for all colleagues to be heard and take action.

Leaders play a critical role to drive inclusion from the top down. Managers across the business undertake inclusive leadership training to help them understand the impact and influence they have on inclusion, and disability awareness training to improve ways of working for people with differing abilities.

We are proud of how far we have come and in our latest internal engagement survey 89 per cent of colleagues said that United Utilities supports diversity and inclusion in the workplace, recognising our drive to be an inclusive workplace of choice. Our equity, diversity and inclusion category is in the top three highest scoring categories this year, scoring higher than the high performance norm, UK norm and utilities norm benchmarks.

We've committed to supporting the '10,000 Black Interns' programme over the next five years and have converted over 20 interns into full-time employment following the programme. We continue to run our 'Stepping Up' programme specifically designed for colleagues from an ethnic minority background who aspire to develop their careers at United Utilities. The programme has provided participants with opportunities to network with senior leaders, external speakers, sponsors and mentors, and to develop personal and leadership skills to help them fast track their careers with us. Since completing the programme, 50 per cent of participants have already secured a new role and over 40 per cent now manage a team.

Our multicultural texting service, to our customer-facing roles in the field, offers real-time information on cultural events and celebrations happening around our region. Giving general awareness of different cultures and faiths, it also gives our colleagues the tools to understand possible differences in water usage, in turn offering the best customer service we can.

We recognise the need to attract diverse and talented individuals with an interest in science, technology, engineering and maths (STEM) and have a focused approach to improving the gender diversity of our workforce. To inspire young people from a wide range of backgrounds into STEM-related careers, we continue to run our award-winning 'Engineering Masterclass' competition with secondary schools from the local area – some of which have a high number of pupils from deprived and disadvantaged backgrounds.

We continue to promote and support strong female role models at all levels of our organisation. We offer targeted support for future female talent through our female leadership pipeline, our new ILM Level 5 Women in Leadership programme and our Aspiring Manager programme, which have all been designed to support colleagues into leadership positions. We have achieved gender balance on our Aspiring Manager Programme with 50 per cent of colleagues currently on the programme female.

Overall, 48 per cent of our graduates and 33 per cent of our apprentices are female. We remain committed to closing the gender pay gap in our organisation. At 14.3 per cent, our median gender pay gap is less than the national average and less than the gap in similar STEM-industry organisations. We are confident that the work we are doing to attract, support and develop women, to build a 'pipeline' of female talent, will bring long-term improvements in our gender pay gap.

Stronger — Impact of material themes on our approach to creating a stronger North West

Cyber security

Our cyber security strategy is largely focused on the security requirements within the Cyber Assessment Framework created by the National Cyber Security Centre (NCSC). This outlines 39 security controls that are required to achieve an industry standard of compliance. These are driven from an EU-defined maturity scale of best practice that is reflected across all European operators of essential services. We have had a strong, dedicated programme of work in place for four years aimed at meeting and maintaining compliance, and have met regular expectations at all times.

Our longer-term strategy and investment plan aims to bolster our broader security posture by focusing significant effort on people, process and technology. Our current technology services portfolio includes a number of security-specific enhancements aimed at bolstering our existing profile for cyber.

We maintain a good relationship with the NCSC through our dedicated contacts and ensure we have up-to-date visibility of developing and long-term threats at all times, which helps shape our approach to security.

Financial risk management

We have robust treasury policies, targets and thresholds covering the key financial risks: liquidity risk, credit risk, market risk (inflation, interest rate, electricity price and currency), and capital risk.

The strategies and limits set out within these policies are designed to avoid excessive volatility and risk, align with the regulatory model in which we operate, maintain strong credit ratings and deliver efficient financing. Ensuring our financing costs are efficient is one of the things that helps to deliver our strategic priority to spend customers' money wisely.

As well as managing our exposure to financial risks, these policies help us to ensure we maintain compliance with relevant financial covenants, which are in place primarily in relation to historic borrowings from the European Investment Bank (EIB) and include interest cover and gearing metrics.

Read more about our financial risk management policies in note A3 to our financial statements on pages 208 to 215.

Supporting communities

We work in, and with, communities across the North West, and we support them with improved services, engagement and communication as well as direct financial support in community projects and partnerships.

The strategic importance of supporting communities across the North West is reflected in our strategic priority to contribute to our communities and also in our unique approach to engagement and development of our AMP8 business plan. We conducted extensive engagement and created five individual plans for each of the diverse and wonderful counties across our region, setting out how we plan to tackle each county's specific needs, challenges and opportunities.

We believe this approach is fundamentally important to successful delivery of our future plans, and we have already mobilised our teams into a five counties structure ahead of the start of AMP8, with five dedicated area engagement leads and county delivery squads.

We are a purpose-led organisation

Our strategy is set and governed by the board and its committees, and aims to deliver our purpose and create sustainable value for all of our stakeholders.

Governance structure

Our governance structure is set out in the diagram below and with more detail on page 106 including the roles of each committee and alignment against our six strategic priorities.

The board has overall responsibility for the company's purpose, value and strategy and approval of the business plan and annual budget. It delegates certain roles and responsibilities to its principal board committees, allowing them to probe deeply and develop a more detailed understanding.

The board provides oversight and challenge, including of climate and nature-related matters, through our business model, where we:

- consult and plan for best value over the short, medium and long-term horizons;
- deliver the outcomes set out in our regulatory contract;
- create long-term value for a range of stakeholders; and
- monitor and review our performance.

The main responsibilities of individual board committees can be found in the corporate governance report, and these pages include our reporting against the 2018 UK Corporate Governance Code (the code). We operate our business in line with the management standards to which we maintain certification, including quality (ISO 9001), environment (ISO 14001), asset management (ISO 55001), health and safety (ISO 45001), and customer vulnerability services (ISO 22458).

Every month, the CEO provides the board with an executive performance report, covering financial and operational performance. The board committees also report back to the board on what was discussed at their meetings, decisions taken, and, where appropriate, make recommendations on matters requiring board approval.

The executive team, comprised of senior managers that report directly into the CEO, is responsible for implementing our strategy and for the day-to-day running of the business and other operational matters. It holds two scheduled meetings each month, one focusing on day-to-day performance and the other focusing on matters of a strategic nature, along with weekly informal 'scrums' and ad-hoc communications.

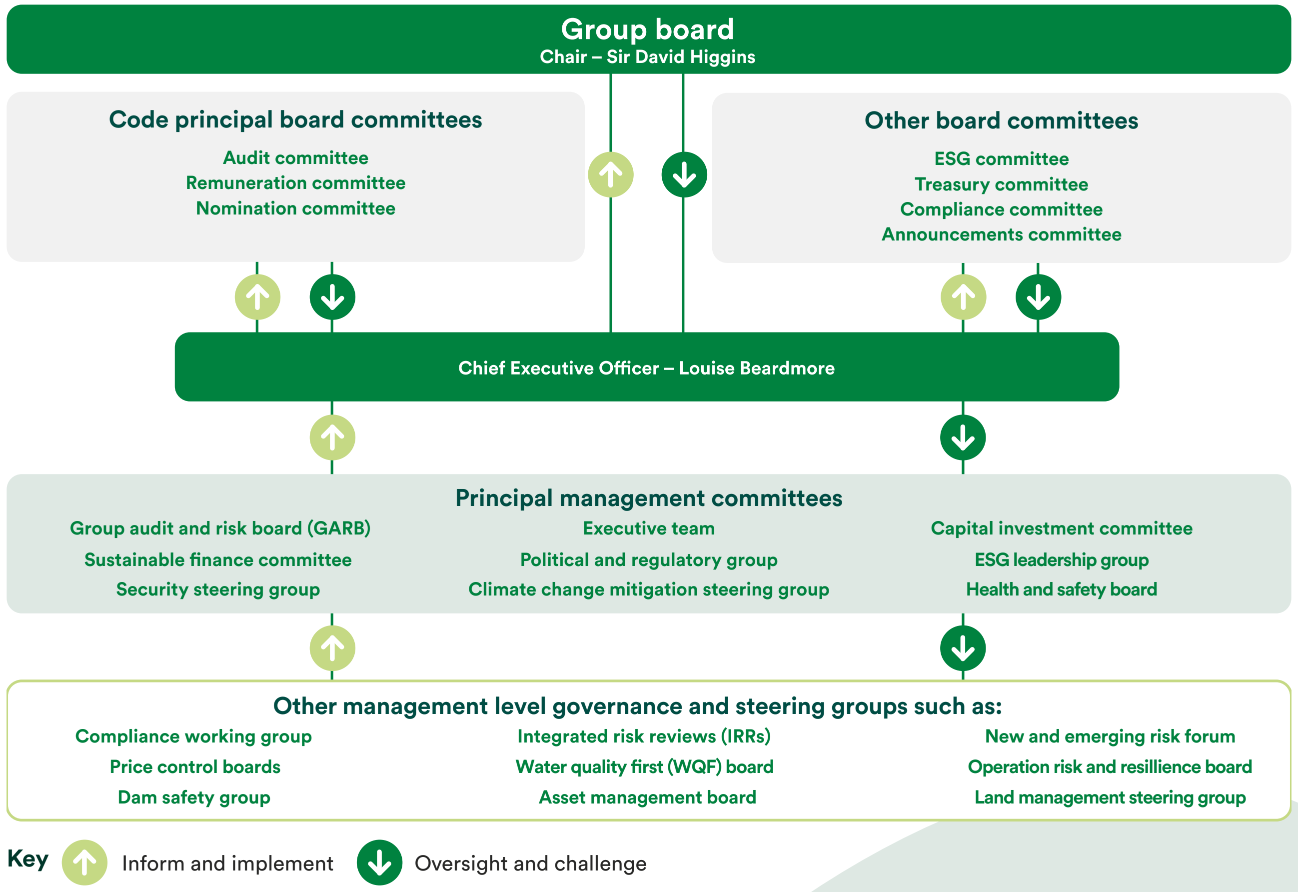
Through the principal management committees, senior managers discuss the needs of the business, raise issues, identify and delegate appropriate actions, monitor progress of key performance measures, and ensure any lessons learnt are implemented. Additional cross-business groups at management and business unit level manage both day-to-day and strategic risks and opportunities, and implement decisions of the board and its committees. Information on progress and performance feed up through the committees and ultimately to the board through this structure.

Read more in our corporate governance report on pages 99 to 163, including individual reports of board committees

In this section you will find:

- How the organisation is governed by the board and its principal committees
- Our culture and core values
- Stakeholder engagement and our S172(1) Statement
- Governance of risks and opportunities in relation to climate, nature, and other material themes

Governance structure of the board and its committees and the principal management committees



Governance and reporting process for risk management

We have a well-established governance and reporting structure for risk and resilience. In line with the code, the board has overall responsibility for establishing, maintaining and monitoring the risk management and internal control systems, with our CFO having executive responsibility for implementing the enterprise risk and resilience framework. This includes the development and roll out of the risk and resilience policy; establishing associated governance and steering groups; and employing dedicated risk and resilience teams, in particular the corporate risk team, which is responsible for the embedment of the overarching risk and resilience framework and processes.

The board undertakes a comprehensive review of the business risk profile twice a year in line with the full and half-year reporting cycle. This review considers the nature and extent of the most significant event-based risks relative to inherent risk areas (see page 52), new and emerging risks and any watching briefs (topics where there is currently insufficient information to assess the risk). The board also undertakes specific reviews of individual risks at each meeting. In combination, the profile review and specific review of risk by the board supports decision-making, enabling it to:

- decide on an acceptable level of risk, relative to risk appetite and tolerance, to deliver on the group's strategy;
- ensure appropriate controls and mitigation are in place, and test the appropriateness of plans;
- report externally on the long-term viability of the company in an informed manner; and
- monitor and review the effectiveness of risk management procedures and internal control systems.

Prior to the full and half-year review by the board, the executive-led GARB provides an initial oversight of the risk environment, undertaking a 'top-down' assessment of the risk profile. Key points and themes are then fed into a number of director-led integrated risk reviews (IRRs) for the 'bottom-up' assessment of risks, controls and the determination of further mitigation. These IRRs include senior managers and subject matter experts to ensure a holistic consideration of correlating risks, the interdependency of controls, and new and emerging circumstances. The outcome is then collated by the corporate risk team and reviewed by the executive committee before escalation to the board.

The effectiveness of risk management and internal control systems is formally reviewed on an annual basis, in accordance with the code. The assessment, which takes into account relevant governance, risk management, internal control and assurance factors, is undertaken by the GARB before escalation to the audit committee, which acts on behalf of the board on this matter. See page 119 for further details of the effectiveness review and outcome. The internal audit team provides periodic independent assurance on the effectiveness of risk management. This was last undertaken in 2023 for both risk management and, separately, for risk appetite and tolerance.

Our culture and core values

Culture

Our culture drives the interactions we have with our stakeholders, and our commitment to responsible business and sustainability is reflected in the way we measure and report the value we create as a business. Our culture is underpinned by three core values (set out below), which cascade down the business from the board to every one of our colleagues, guiding how we expect our people to behave to drive a high performing and innovative culture.

When assessing culture, we look at four elements – our core values (set out below), our purpose, our strategic priorities, and our people.

Read more about our culture and how the board monitors this throughout the year on page 110

Metrics are monitored and targets set for the greener, stronger and healthier ambitions within our purpose. These are closely aligned to our strategic priorities and to ESG matters. We also monitor a number of key metrics relating to our people, including engagement, health and wellbeing, diversity, and development.

Read more about our operational performance on pages 68 to 89

Core values

Our core values demonstrate the way we work and reflect, in a way that is clear and easy for all our colleagues to apply to every situation, the things we believe are most important to help us deliver our purpose of providing great water for a stronger, greener and healthier North West.

Do the right thing

First and foremost, as a responsible business, we want our people to always focus on doing the right thing. This means always putting safety first, delivering for the benefit of our stakeholders, championing fairness, acting with courage and integrity, and speaking up if they come across anything that doesn't feel right. This is vital for building and maintaining trust with the public and our stakeholders, and for delivering our purpose: doing the right thing for the natural environment helps us to create a greener North West; and doing the right thing for customers, communities, colleagues and suppliers helps us to build a stronger and healthier North West.

Make it happen

We are focused on supporting each other and working as a team to make things happen, taking accountability and putting progress over perfection. We want to celebrate successes, for individuals and for the company, and learn when we don't get things right first time.

This can already be seen across the business. We enable and foster new ways of working through our Innovation Lab process. We are able to act quickly and capitalise on pockets of efficient financing opportunity. We have also made decisions to accelerate investment where we can deliver improvements for customers and the environment faster.

Be better

Ultimately, everything we do is about improving things and creating a better tomorrow for everyone. We want to be better as a company, and this means encouraging our colleagues to live this value as well – being curious, ambitious, and solution-focused, seeking out new and innovative ways to deliver our services more efficiently and effectively. We want to ensure we are learning from the best people that are available to us, which is why we embrace equity, diversity and inclusion, collaboration and partnership opportunities, nature-based solutions, and other innovation and best practice ideas from across our sector, other industries, and the wider world.

Remuneration linked to sustainability performance

Part of being a responsible business and delivering our purpose involves making sure our executive, and colleagues, are remunerated in line with our performance for a number of stakeholders, measuring against sustainability metrics rather than purely financial performance.

Bonus measures drive remuneration for all colleagues, and the executive and senior leaders are also remunerated against longer-term performance targets through the Long Term Plan (LTP).

Bonus and LTP remuneration are both linked to service and delivery for customers and the environment, as well as financial targets. This includes customer satisfaction, customer outcome delivery incentives (ODIs), carbon measures, pollution and spills performance, and effective and efficient delivery of our capital programme.

Read more about our bonus and LTP in the remuneration report on pages 140 to 163

Engaging with our stakeholders

Active engagement helps us to understand what matters most.

We engage with all of our stakeholders, including the six key groups for whom we create value, detailed on pages 06 to 07, and others that influence our activities (below right). Strong, constructive relationships help us understand what matters most to them, and feedback from stakeholders has an influence on what we do, helping us to create long-term value for all.

There is robust governance to ensure regard is given to stakeholder views and priorities in decision-making at executive and board level. Our S172(1) Statement on pages 47 to 48 provides examples of how the board has had regard to stakeholders in some of the key board decisions made during the year.

The ESG committee has stakeholder engagement and reputation as standing agenda items, and the chair of the independent customer challenge group (YourVoice) attends the relevant board meeting each year to provide its perspective on the customer-related content in our annual performance report.

Colleagues

We could not deliver our services without our colleagues, and they act as the face of our business. They know our business better than anyone, and bring a diverse range of views and experience, making them well placed to help us identify new ways of working and opportunities for improvement, which can be raised directly to the CEO through our 'Call it Out' initiative.

Communities

Our work puts us at the heart of local communities, places where customers and colleagues live and work. We want to support them to be stronger and increase understanding of the impact and contribution our work has. We balance decisions based on often competing stakeholder interests and look to develop collaborative and partnership solutions where feasible.

Customers

To deliver value for customers, we need to understand their short-term issues, and longer-term expectations of us as their water company. As expectations change, we need to evolve our services to ensure we meet them. We actively seek feedback on what customers think about us so we can make our services better and address the issues that matter.

Environment

We depend on the environment and have a key role in protecting and enhancing it. We engage with interested groups such as environmental regulators, non-governmental organisations, campaigners and local communities to find the best ways to tackle environmental issues, like climate change and land management. Working together is often the best way to find the right solution.

Investors

It is important that investors have confidence in the organisation and how it is managed. We provide regular updates to debt and equity investors and meet with many top investors to establish two-way dialogue about matters of interest to them. Increasingly, this includes environmental, social and governance (ESG) updates alongside financial and performance data.

Suppliers

Good relationships help ensure projects are delivered on time, to good quality, at efficient cost. Awareness of issues in the supply chain means we can address them together and become more resilient. Supplier engagement can also help us identify and realise innovative approaches and solutions, and our Bid Assessment Frameworks help us find new partners.

Media

The media is influenced by public interests, which, in turn, influences them through what it reports. Many people hear about us and our activities from traditional and/or social media, so it is important that coverage is fair, balanced and accurate. This requires effective two-way dialogue and continuous engagement on important issues.

Politicians

Politicians influence the long-term national water strategy and environmental priorities, matters that affect how all businesses operate, and champion issues raised by their constituents. Local government, elected representatives and devolved administrations provide insight into shared ESG and economic issues across the North West.

Regulators

Through proactive, constructive engagement with economic, quality and environmental regulators, we understand requirements and deliver against commitments, aiming to meet or exceed the expectations they have of our business. We actively engage in workshops and respond to consultations to contribute towards the policy and regulatory framework.

Our strategic priorities

- Improve our rivers
- Create a greener future
- Deliver great service for all our customers
- Provide a safe and great place to work
- Spend customers' money wisely
- Contribute to our communities

S172(1) Statement

Our key decisions during the year to 31 March 2024

Throughout this integrated annual report, we provide examples of how the board has thought about the likely consequences of long-term decisions and how we:

- build relationships with stakeholders and balance their needs and expectations with those of the business;
- understand the importance of engaging with our colleagues;
- understand the impact of our operations on the communities in our region and the environment we depend upon;
- are mindful of the interactions we have with our regulators; and
- understand the importance of behaving responsibly and being consistent with the company's purpose, values and strategic priorities.

Statement by the directors in performance of their statutory duties in accordance with S172(1) Companies Act 2006

The directors of United Utilities Group PLC, both individually and together, consider that they have acted in the way, in good faith, that would be most likely to promote the success of the company for the benefit of its members as a whole and in doing so having regard (amongst other matters) to factors (a) to (f) s172(1) Companies Act 2006, in the decisions taken during the year ended 31 March 2024 including:

AMP8 business plan submission and long-term delivery strategy:

Link to strategy

The decision

The AMP8 business plan was approved for submission to Ofwat on 2 October 2023.

How we engaged with stakeholders

Customer and stakeholder engagement directly informed the development of our business plan. Our five-year business plan is set in the context of a 25-year long-term delivery strategy (until 2050). We wanted customer insight and research to directly inform our business plan, which covered ambition and performance commitments, such as water supply, customer experience, affordability, biodiversity, and carbon/net zero. Engagement was conducted in a variety of ways including: setting up customer focus groups, workshops and online community panels, carrying out face-to-face surveys and over the phone and online, and working with our partnerships, in addition to the countless conversations taking place daily. YourVoice, the independent challenge group for the North West, continued in its role to review and challenge our approach to research and engagement, closely examining our strategies and plans relating to affordability, social value and the environment.

This year, we ran 'Your water, your say' online panels for each of the North West's five counties – Cumbria, Lancashire, Merseyside, Greater Manchester and Cheshire – with a further workshop open to attendees from across the entire region. At panel sessions, the CEO and selected members of the executive team answered questions from customers and stakeholders. Each county session was facilitated by an independent chair from YourVoice, while for the regional session, an independent chair was appointed by Ofwat and the Consumer Council for Water.

The panels held in June sought feedback on the proposed business plan, seeking views from customers and stakeholders about our proposals; at those held in November we shared details on the actual plan submitted to Ofwat and how stakeholder insight had shaped this. Attendees were encouraged to ask questions on any topic of their choice or to submit questions in advance for the chair to raise on their behalf. The output of the sessions in June was taken into consideration in formulating the business plan, the customer aspects of which were reviewed by YourVoice. In total, over the 12 sessions, around 2,000 stakeholders registered their interest, with around 700 joining the sessions. Over 300 questions were answered at the November sessions alone.

The board's view

The board was satisfied, supported by independent third-party assurance, that the customer research and stakeholder engagement was of high quality and that the business plan consistently reflected customers' and other stakeholders' views and priorities obtained during the course of our research and testing. The board believes that having our business plan informed by customer and stakeholder views would be most likely to promote the long-term success of the company for the benefit of its members as a whole.

Five counties model

Link to strategy

The decision

To structure our operations by integrating our network and treatment activities, deliver our plans and invest in new capabilities on a regional basis, and in doing so communicating and providing more transparency than before about our services to our regional stakeholders and recognising the regional differences of the five counties within our area.

How we engaged with stakeholders

Building on the wider stakeholder engagement of the online 'Your water, your say' county workshops, all colleagues were invited to an event held in Blackpool where they learned about the business plan and the new five counties operating model. We engaged with community and environmental groups and charities, and held both a Rivers Forum and customer vulnerability summit in November 2022. We wrote to every MP and local authority offering to talk through the benefits our plan will deliver in each county. There have been several follow up conversations with these stakeholders to explore opportunities for greater collaboration on improving how water is managed across the region.

The board's view

The five counties in the North West are varied in nature, experiencing a range of different social conditions and natural environments from the predominantly rural and sparsely populated Cumbria to the urban and densely populated cities of Liverpool and Manchester in Merseyside and Greater Manchester respectively. Each area provides its own challenges and opportunities, and no more so than when it comes to the delivery of water and wastewater services to customers. Additional demands on water and wastewater infrastructure are expected to be concentrated in certain high-growth areas, such as Manchester and Carlisle. We know that protecting the environment and the quality of coastal waters is important for customers and the regional economy with notable tourism hotspots

S172(1) Statement continued

Five counties model continued

such as the Lake District, designated as a UNESCO World Heritage Site in 2023, and Blackpool. Along our region's coastline we have 29 designated coastal bathing waters, and 26 designated shellfish waters. The North West marine plan areas are of particular importance to numerous bird species, including Liverpool Bay, which is designated as a marine special protection area. Population growth and the associated development of new or extended urban areas means water efficiency and rainwater management are key priorities during AMP8 and the longer term. The board believes the county approach to deliver our plan would be most likely to promote the long-term success of the company for the benefit of its members as a whole.

Clean energy and renewables

Link to strategy

The decision
The board endorsed the aspirations of the group's clean energy strategy focusing on bioenergy, renewable energy generation – the majority of the opportunities identified being 'front of meter' schemes selling power back to the grid, and battery storage facilities.

How we engaged with stakeholders
Feedback from investors and analysts towards investment in clean energy opportunities continues to be supportive, using funds from shareholders and so outside of the regulated business. We are participating in a pioneering carbon-capture facility, funded by the Department for Energy Security and Net Zero through their Direct Air Capture and Greenhouse Gas Removal Innovation Programme, which will be constructed on our head office site at Warrington. Once the facility's carbon-capture capabilities are proven, the heat and power generated by the process could be redirected to heat our on-site buildings as part of our long-term decarbonisation of the site.

The disposal of United Utilities Renewable Energy Limited (completed in September 2022) provided capital to invest in non-regulated activities and we know that our customers are supportive of our net zero ambitions, particularly when the costs are not impacting customer bills.

The board's view
United Utilities uses around 800GWh each year of electricity – costing in the region of £164 million during 2023/24 and with usage forecast to increase, we need to take every opportunity to minimise our electricity usage as well as de-risk our susceptibility to energy price volatility.

The clean energy generation opportunities identified to date are predominantly solar arrays. Approximately 1,000 hectares of the company's land assets across 142 locations are considered to be potentially suitable for development in this way. In generating clean energy and using battery storage facilities we will be improving our resilience and energy security and provide mitigation for energy usage/price volatility. We are particularly mindful of the potential human rights/forced labour supply chain risk in the manufacture of solar panels and batteries, including the component parts and minerals used in battery manufacture. Mitigation of this risk will be managed through the human rights and modern slavery working group and our United Supply Chain approach.

The board believes our approach to clean energy will contribute toward the achievement of our net zero ambitions and our strategy to create a greener future for the North West and would be most likely to promote the long-term success of the company for the benefit of its members as a whole.

Greener: climate — Governance around climate-related risks and opportunities

TCFD governance disclosures

a) The board and its committees, in particular the ESG committee, have oversight and scrutiny of climate change matters, including tracking delivery of our carbon pledges, science-based targets, and review of the climate-related risks.

b) Climate-related governance is fully integrated in the responsibilities of multiple principal management committees including the ESG leadership group, climate change mitigation steering group and sustainable finance committee.

Where climate-related matters are considered within our governance structure for the board and the principal committees is illustrated on page 106

Board oversight of climate-related risks and opportunities

The climate and natural environment are critical to our purpose to provide great water, which is why climate change mitigation and adaptation are both identified as material themes and monitoring of climate-related matters is a core activity of our board and the principal committees.

The board of directors sets, reviews and guides the strategy of the group ensuring the long-term success of United Utilities for customers, investors and wider stakeholders. The board approves the business plan, annual budgets and group policies. The impact of climate change on the assets and liabilities of the group are described within the accounting policy notes to the financial statements, see page 188. Climate-related issues feature strongly in our environment policy and in turn directly influence our value-based decision-making. This enables us to plan and deliver investments that represent best value for the environment and communities.

Our CEO, Louise Beardmore, has accountability to the board for climate matters. Louise is an active and vocal champion with respect to environmental topics and initiatives and she passionately promotes the need for both pace and scale of action to adapt and mitigate climate change.

Climate-related matters have been discussed by multiple board level committees this year including each of the four ESG committee meetings when topics included our carbon pledges, our emerging clean energy strategy and scope 3 emissions. The ESG committee, via the ESG leadership group, also reviewed the sustainability capabilities required by our board and executive management team. This resulted in relevant training being completed and chapter zero membership for our asset management director and head of ESG and sustainability. Our newly appointed non-executive director, Michael Lewis, comes with a wealth of zero carbon energy and sustainability experience, which will be applied to our business.

The audit committee considered climate in its reviews of the group risk profile, including those sensitive to climate and the carbon commitments risk, and also in relation to the introduction of the integrated risk reviews. The remuneration committee has continued to endorse the link between long-term incentive outcomes and the delivery of GHG emissions reductions by including a new metric related to energy use from low-carbon generation.

Management role

Climate and the environment are valued highly by the business, evident by most committees contributing to 'create a greener future'. Climate-related matters, therefore, influence both day-to-day and strategic decision-making and behaviours. For instance, this year, there have been actions to drive efficiency and process excellence, develop a clean energy and renewables strategy and include climate-related criteria into supplier selection.

Our CEO demonstrates her accountability for the group's preparedness for adapting to climate change and driving our mitigation strategy through chairing all relevant management committees.

Our CFO, Phil Aspin, has executive responsibility for risk management and has made climate change and ESG core to the business culture. The executive management team, through its groups and committees, is tasked with assessing and managing the climate-related risks and mitigating actions, such as ensuring the company has the necessary financial resources and skilled people in place.

The business risks that are sensitive to climate change are set out on page 57

Read more about our committees including how often they meet and their ESG skills on pages 106, 108 and 115

Greener: nature — Governance around nature-related dependencies, impacts, risks and opportunities

TNFD governance disclosures

a) Nature is embedded in our governance structure and regulatory commitments. This is overseen and challenged by the board and its committees.

b) Interactions with nature through our operations are managed in multiple principal management committees across the business.

c) Our human rights policy ensures a safe and great place to work, we actively work with our supply chain through our responsible sourcing principles.

As with climate-related matters, our CEO has overall accountability for nature-related matters with tracking, monitoring and management of impacts and dependencies on nature spread across many of our principal management committees. For instance, the executive team is responsible for regulatory performance that relates to nature, the ESG leadership team is responsible for matters such as natural capital, land management and biodiversity, and the political and regulatory group is responsible for monitoring existing and emerging legislation on nature.

Natural capital and biodiversity

Natural capital and biodiversity matters are primarily managed by the ESG leadership group, with risks identified through natural capital accounting, climate adaptation planning, and our natural capital risk assessment process. Identified risks and opportunities are fed into our corporate risk register and overseen, and escalated as necessary, by the executive team.

Our performance and progress in priority locations, such as delivery of the WINEP, wider improvement in wastewater treatment, catchment management, our progress towards 100 per cent of Sites of Special Scientific Interest (SSSIs) having favourable or recovering status, peatland restoration, woodland planting, and our operational environmental performance, are shared monthly with the executive team.

Storm overflows and river water quality

We have recently appointed a dedicated director to manage the end-to-end process of our Better Rivers programme to improve river water quality and reduce storm overflow operation. The Better Rivers programme is overseen by the executive team, with regular updates and challenge from the board and its committees. Our Better Rivers commitments and spill reduction target feature prominently in the annual bonus scheme.

Approach to human rights

Our CEO has overall responsibility for compliance with human rights and modern slavery laws and best practice, with oversight from the board. The political and regulatory group and the ESG leadership team both have human rights and modern slavery within their remit. Ensuring that United Utilities is a safe and great place to work is one of our six strategic priorities, which reinforces the importance of human rights for colleagues in the business and supply chain.

Another of our strategic priorities is to 'contribute to our communities', supporting us to build the needs of local communities into our strategies and plans. We are committed to tackling modern slavery, both in terms of our own business operations and in our supply chain. Last year, we completed 34 site audits with modern slavery due diligence checks on our construction partner sites. All roles identified as relevant must complete our modern slavery e-learning course, focusing on customer and community-facing roles to raise awareness of potential modern slavery risks.

As a UK utility company operating with a principal footprint in the North West, our use of stringent employment checks means it is highly unlikely that modern slavery or human trafficking has occurred within the local area as a result of our operations, or as a secondary consequence of our actions.

As part of our United Supply Chain (USC) approach, our responsible sourcing principles are structured around ESG issues that are important to us as a business and in our approach to responsible sourcing. Considerations on modern slavery are incorporated into the wider issues of human rights and fair treatment, specifically: 'Treat people with dignity and respect, whilst working to eradicate modern slavery in all its forms'. We are aiming to ensure that 100 per cent of targeted suppliers will be signed up to our responsible sourcing principles by 2025.

Our supply chain modern slavery risk assessment is available on our website at unitedutilities.com/corporate/responsibility/our-approach/human-rights/modern-slavery-policy

See how nature-related matters are considered within our governance structure on page 44

Healthier — Governance around material themes related to our ambition to create a healthier North West

Customer service and operational performance, including drinking water quality

Overall responsibility for operational performance, including drinking water quality, sits with the CEO, and an update on performance against a range of key metrics and targets for the different operational performance areas is presented to the board every month in the executive performance report. The report uses a traffic light system to show performance in-month, year-to-date, and changes from the prior month, with accompanying narrative. This enables progress to be tracked and any potential issues, developments or opportunities to be fully understood and swiftly addressed.

Each operational performance area has a responsible director and strategic leadership team responsible for the day-to-day delivery of our operational targets and commitments.

Additional governance oversight of our performance on drinking water quality is provided by the DWI, as quality regulator, who has recognised the significant improvements we are making. Operational performance is also overseen by our other regulators, as detailed on page 24.

Affordability and vulnerability

The customer services management team has responsibility for the delivery of our affordability and vulnerability schemes, including our certification to ISO 22458 for our Priority Services scheme. Schemes are continuously monitored and performance is reported to the executive performance meeting and the board on a monthly basis. Affordability and vulnerability are reviewed by the board twice a year.

Health, safety and wellbeing

Relevant matters, including policies and our accreditation to ISO 45001, are managed through the health, safety and wellbeing team and reported monthly to the executive. An annual management review process has been implemented with the executive team to review performance and effectiveness of systems and controls, helping to drive improvements. Health, safety and wellbeing is reported to the board every month, with a detailed review twice a year. Day-to-day responsibility for delivering our plans and monitoring progress sits with our health and safety director.

Diverse and skilled workforce

The nomination committee is responsible for board succession, ensuring the right mix of skills and experience, and there is a designated non-executive director on the board with overall responsibility for workforce engagement. Day-to-day responsibility sits with our people director.

Leaders have an important role in championing equity, diversity and inclusion (ED&I). Executive directors drive the delivery of our strategy and role model inclusivity. Each of our colleague networks (which support colleagues within minorities and focus on educating, raising awareness and celebrating key events) has two executive sponsors, who provide support, listen, and escalate action. Our colleague networks meet with these sponsors as a group to review progress, with the people director to provide insight and feedback, and they review the plan and next steps with the ED&I manager.

The inclusion steering group is responsible for the overall ED&I plan, providing updates and tracking progress. The ED&I manager works alongside business areas and colleague networks to deliver plans and raise awareness, both internally and externally. The people director sponsors the plan and tracks progress against our 2030 targets. Regular updates are provided to the ESG committee. Our people dashboards give access to real-time, secure data including new starters, attrition, training, and colleague opinion survey feedback on inclusion, allowing senior leaders to develop and track plans.

Stronger — Governance around material themes related to our ambition to create a stronger North West

Cyber security

The board is responsible for the oversight of cyber security and updates are provided at each of its scheduled meetings, with a presentation given by the chief security officer twice a year. The executive team is updated on performance on a monthly basis.

The security steering group (SSG) meets monthly to consider changes to digital and physical security risks and mitigating actions, and to review any incidents. Members of the committee include the company secretary, who has responsibility for security matters and is in attendance at all board meetings, the chief security officer, and representatives from each business unit. The SSG reports security metrics on a quarterly basis to the GARB, and six-monthly to the board. As it is one of our principal risks, an update on cyber security is provided every six months to the board. The chief security officer reports to the company secretary and, along with the information security team, works closely with the digital services team.

Our information security policies and compliance are aligned to ISO 27001. As a provider of essential services for UK Critical National Infrastructure, we are governed by the Network and Information Systems Regulations, which came into force in 2018 and focus on cyber security compliance. We are making good progress with our programme of work to comply with these regulations. We are required to comply with the Security and Emergency Measures Direction (SEMD) to maintain plans to provide a supply of water at all times, and this includes security components. A SEMD report is submitted annually to the DWI, with prior independent attestation.

Financial risk management

The board is responsible for treasury strategy and governance, which is reviewed annually. The treasury committee has responsibility for setting, and monitoring the group's adherence to, treasury policies. Policies are reviewed on at least an annual basis, or following any major changes in treasury operations and/or financial market conditions.

Day-to-day responsibility for operational compliance with the treasury policies and the targets set therein rests with the group treasurer. An operational compliance report is provided monthly to the treasury committee, detailing our performance and compliance with these policies, and highlighting the level of risk against the appropriate risk limits in place, with more detailed management information provided quarterly.

The group's treasury function does not act as a profit centre and does not undertake any speculative trading activity.

Supporting communities

We have appointed five dedicated area engagement leads for each of the counties in our region, overseen by our head of regional engagement, and have structured our teams into a new county delivery squad structure, designed to promote successful delivery of the performance improvements and scale of investment included in our AMP8 business plan.

United Utilities Group PLC Integrated Annual Report and Financial Statements for the year ended 31 March 2024

Our risk and resilience framework

We have a robust risk and resilience framework for the identification, assessment and mitigation of risk.

In this section you will find:

- Our approach to identifying, assessing and managing risks and opportunities
- Our principal risks
- Our management of climate, nature and other risks related to material themes
- New and emerging risks and opportunities
- Material litigation

Our approach to risk and resilience

Successful management of risks and uncertainties enables us to deliver on our purpose to provide great water for a stronger, greener and healthier North West, and be more resilient across our corporate, financial and operational structures. A key objective of our approach to risk and resilience is to support the sustainable achievement of the strategic priorities (see page 31), that underpin our purpose.

Our risk and resilience framework provides the foundation for the business to:

- anticipate threats and variability to delivering an effective service in these challenging times;
- understand the interrelationships and interdependencies for an integrated approach;
- apply preventative measures to avoid, or increase resistance and reliability; and
- respond and recover effectively when risks materialise.

Key components of the framework include:

- an embedded group-wide risk management process, which is aligned to ISO 31000:2018 risk management guidelines;
- a board-led approach to risk appetite, based on strategic goals;
- a strong and well-established governance structure giving the board oversight of the nature and extent of risks the group faces, as well as the effectiveness of risk management processes and controls; and
- a portfolio of policies, procedures, guidance and training to enable consistent, group-wide participation by our people.

Continuous improvement is a key feature of the framework, which incorporates a maturity assessment model to identify areas to enhance. Based on risk management capabilities relative to five levels of maturity, we continue to encourage an integrated approach through:

- maturing the escalation of data from operational risk assessment;
- reinforcing reputational impact (the impact on trust) using the six capitals and stakeholders to emphasise this;
- standardisation of controls for cross-business analysis; and
- the continued development of tactical risk appetite and tolerance statements.

Roles and responsibilities

In addition to the governance and reporting structure (see page 44), the risk and resilience framework incorporates specific roles and responsibilities. Executive members (business unit heads) are accountable for sponsoring risk management activity in their business unit; for the determination of strategic risk appetite (the propensity to take risk and apply control); and tactical level tolerances for each event-based risk. Executive sponsors delegate responsibility for the risk assessment, and the implementation of control/risk mitigation to risk sponsors. Risk sponsors are senior managers who identify and consult with cross-business control owners on the effectiveness of controls, and action owners for the determination and progress of further mitigation. Control and action owners are typically subject matter experts who have the remit to mobilise resource. Supporting these risk management roles are a network of risk leads and coordinators within each business area who support the corporate risk team in the coordination and facilitation of the risk management process.

Risk appetite and tolerance

Focused on supporting decision-making, the risk appetite and tolerance framework consists of a package of measures.

The general risk appetite represents financial limits against which event-based risks are compared at each full and half-year assessment and reporting cycle.

In parallel are a series of strategic appetite statements that align directly to the inherent risk areas (see page 52). Each statement reflects the strategic intent, strategic priority, relevant stakeholders and governance, but fundamentally emphasises the attitude to risk taking and control relative to four descriptors:

- **Averse:** a strong opposition to accept risk within business strategy or operational activity.
- **Prudent:** a reluctance to accept risk within business strategy or operational activity, but careful acceptance within tight boundaries.
- **Moderate:** willingness to accept risk with regard to business strategy or operational activity provided this is within reasonable limits.
- **Accepting:** willingness to accept risk with regard to business strategy or operational activity.

As a regulated company providing essential public services, none of the inherent risk areas have risk accepting as a strategic direction or approach.

Underpinning each strategic statement, and currently under development, are a series of more tangible tactical statements with specific levels and limits identified for each of the event-based risks.

Our risk and resilience framework continued

Inherent risk areas and the risk profile

A key feature of the business risk profile is the ten inherent risk areas. These are categories of risk that are based on the value chain of the company, reflecting the interrelationship of the primary and supportive structures or activities across the business where value can be gained, preserved or lost. As a result, they support the identification and/or gap analysis of risk, facilitate analysis of correlation and interdependency, and provide the platform for determining risk appetite and tolerance, which in turn helps us to articulate our direction and priorities to support decision-making around risk and resilience.

Underpinning each inherent risk area are the event-based risks, which are reviewed at the integrated risk reviews at the full and half-year reporting cycle. There are currently approximately 100 event-based risks, which are inherent to the company's objectives and obligations, and cover core elements of the production lines, systems, networks and activities across the business. Each event-based risk is sponsored by a senior manager who is responsible for the ongoing assessment and treatment (management) of risk (see page 53). Each event-based risk remains dynamic by reflecting new and emerging circumstance relative to the ever-changing external threats and internal vulnerabilities.

Read more about our principal risks on pages 54 to 56 and new and emerging risks on page 61

Inherent risk area	Scope	Executive sponsor	Strategic priority	Appetite and tolerance (the propensity to take risk and apply control)
Water service	The assets and operations to deliver a reliable supply of clean safe drinking water.	• Water services director		• Water quality – Averse
Wastewater service	The assets and operations to remove, treat and return water to the environment, and the disposal of sludge to land.	• Wastewater services director • Bioresource and green energy director		• Wastewater – Prudent • Bioresource – Moderate
Retail and commercial	All aspects of business development, income generation and cash collection in regulated and non-regulated businesses.	• Customer and technology director • General counsel and company secretary		• Retail – Averse • Non-regulated commercial activity – Moderate
Supply chain and programme delivery	All elements of the supply chain and the delivery of capital, operational or change programmes.	• Capital delivery, engineering and commercial director • Transformation and strategic programmes director		• Supply chain – Prudent • Programme delivery – Moderate
Resources	The resource to support core business activity, including people (capacity and capability), technology (applications, systems, services and infrastructure), property (other than operational assets) and fleet.	• Customer and technology director • People director • Bioresource and green energy director		• Technology, property and fleet – Moderate • Human resources – Prudent
Financial	The financing and financial control of business activity, including operational expenditure, capital investment, treasury, pensions and tax.	• Chief Financial Officer		• Finance – Prudent
Health, safety and wellbeing	The potential harm to colleagues, contractors, or the public.	• People director		• Health, safety and wellbeing – Averse
Environment	The influence the environment has on water, wastewater and bioresource assets and the impact our operations can have on the environment (air, soil, water and biodiversity) in the short and longer term.	• Asset management director		• Environment – Averse
Security	The security and protection of our colleagues, the public, data and assets.	• General counsel and company secretary		• People, data and critical infrastructure – Averse • Other assets – Prudent
Conduct and compliance	All elements of the regulated, legal and ethical frameworks associated with being a regulated water and wastewater company, which is listed on the stock market with multiple stakeholders.	• Corporate affairs director • General counsel and company secretary • Regulation and compliance director		• Statutory and regulatory – Averse • Conduct and standards – Prudent

Our strategic priorities

Improve our rivers | Create a greener future | Deliver great service for all our customers | Provide a safe and great place to work | Spend customers' money wisely | Contribute to our communities

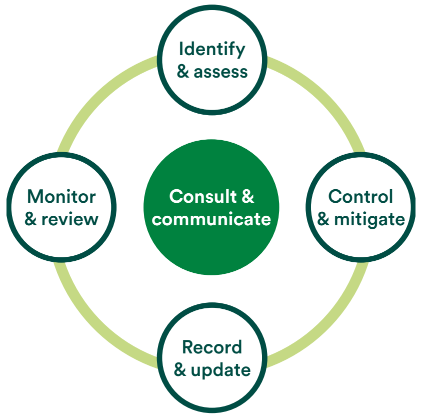
How we assess and manage risk

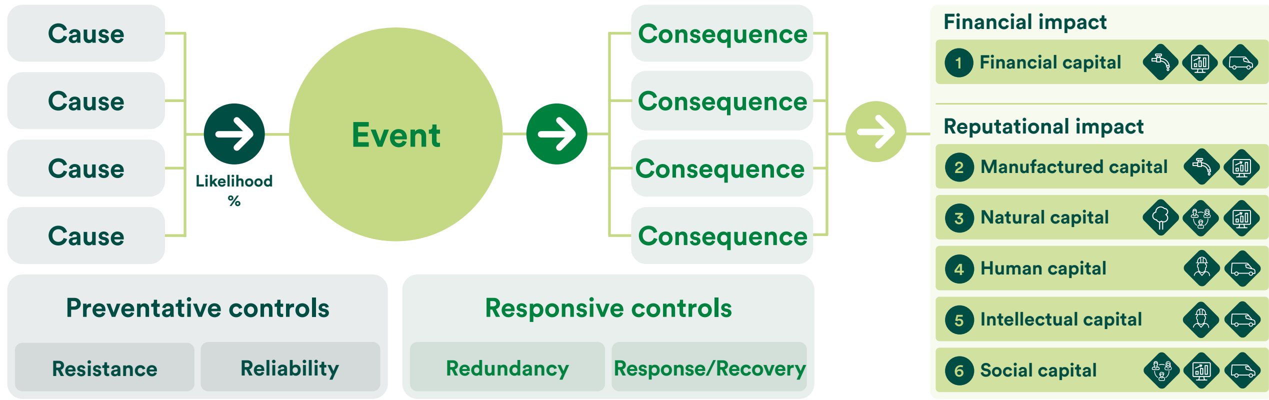
We have a number of mechanisms in place to identify risk, including: the inherent risk areas; the water cycle; cross-business horizon scanning forums; consultation with third parties; and comparison with national risk registers. Understanding the context of the risk is a fundamental part of the assessment, and relative to our objectives and obligations. It takes into account new and emerging circumstances from the internal and external business environment, and utilises 'bottom-up' information from operational and project risk assessments where appropriate. Risk assessments are also supported by 'top-down' assessments as described in the governance and reporting process section on page 45. This integrated 'top-down, bottom-up' approach ensures that reporting reflects the risks facing the company, serves to calibrate the risk assessments, and enables assessment of the risks relative to our appetite.

Following an update of the risk context, the process then quantifies the risk for likelihood and impact with the bow tie diagram below illustrating the components of risk. The likelihood of the event occurring is based on the causal factors with the financial and reputational impacts reflecting the consequences of the event should it occur. Financial impact includes loss of revenue, additional costs, fines, regulatory penalties and compensation. Reputational impact represents the impact on stakeholder trust and the six capitals. The full range of financial and reputational impact is considered from a minimum (best case) to a maximum (worst case) scenario. Out of this range, the most likely impact scenario is assessed. Comparing this position against the desired target state, in combination with the strengths, weaknesses and gaps of the control environment, supports the decisions for further mitigation. Further mitigating action will target either the likelihood of occurrence, the impact, or a combination of both, through new or improved preventative or responsive controls. Further mitigating actions have a specific owner as per roles and responsibilities on page 51, specified resolve by dates and progress status indicators to support monitoring.

Identifying opportunities

Factors from both the internal and external business environment may give rise to opportunities that will positively affect our performance and future prospects. The identification, analysis and management of upside as well as downside risk will further support the achievement of the strategic priorities.





Common themes

Recognising the value of an integrated approach to risk and resilience management, we consider common themes across the event-based risks. This allows us to take a holistic view of the strengths, weaknesses and gaps in our controls, enabling us to take appropriate action.

As part of our risk assessment, we have identified a number of common causal and consequence themes that relate to multiple risks. This allows us to understand correlating risk and take a holistic view of the short, medium and long-term implications of risks materialising. Categorisation indicates seven causal themes and six consequence themes as outlined to the right and on page 54.

As illustrated in the bow tie diagram above, each of the event-based risks has multiple causes and consequences, with impacts that range across all six capitals and stakeholders. Preventative and responsive controls (incorporating four components of resilience – resistance, reliability, redundancy and response/recovery), are also critical to understanding how to reduce the likelihood of the event occurring, limit the impact if the event were to materialise or both.

Common causal themes

Categorisation of all causal themes indicate seven common themes:

- **Asset health:** Asset deterioration, technological obsolescence and operating assets beyond their optimal capacity to cope with increased demand (population growth and/or climate change) affect operational efficiency and resilience.

Common themes continued

- **Culture:** Internal company attitude and behaviour, and external perception and expectations of wider society can lead to increased threat and vulnerability as an organisation relative to service delivery, capital programmes and reputation.
- **Demographic change:** Population growth/shift and evolving age profiles can impact the capacity and capability of water and wastewater treatment and network assets, can affect demand on water resources, and increase uncertainty in relation to pension obligations.
- **Economic conditions:** Macroeconomic events can have multiple financial implications, including: lower revenue; reduced cash collection; increased operational cost through inflationary pressures; and increased cost of borrowing.
- **Extreme weather/climate change:** Climate change projections highlight increased temperatures, rainfall, wind and more frequent extreme variations in weather patterns with the potential to affect our service delivery and the environment that we strive to protect and enhance.
- **Legislative and regulatory change:** Changes in, or the interpretation of, legislation and regulation can have implications for our business model, asset base and ways of working.
- **Technology and data:** Ageing technology assets, and poor quality data can threaten efficiency and security. In addition, the pace of technological change (including artificial intelligence), and seeking opportunities through increased automation and system integration, can also provide challenges in the adaptability of the workforce and increase security threats through greater connectivity.

Common consequence themes:

Categorisation of all consequences indicate six common themes:

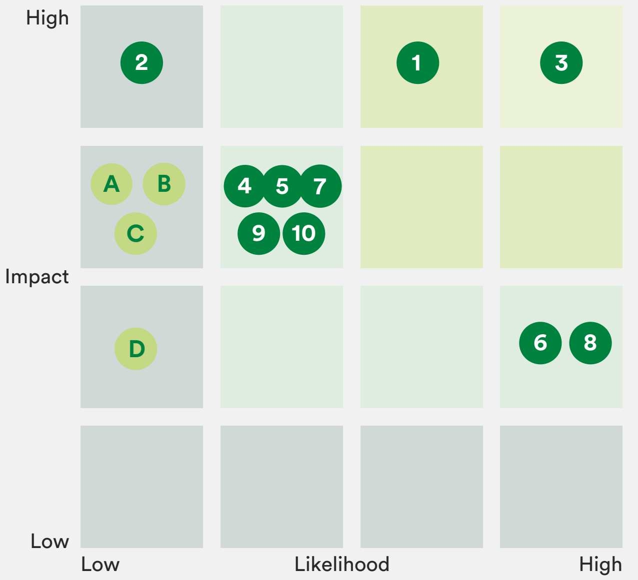
- **Environmental impact:** The potential impact to air, soil, water and biodiversity in the short and longer term, based on our assets, activities, carbon emissions and waste.
- **Investors:** The financial, ethical and environmental performance of our activity has implications for the value of investments and the market perception of the company.
- **Non-compliance:** The potential inadvertent breach in legislation or regulation when undertaking our activities.
- **People:** The diversity, skill set, engagement and wellbeing of our colleagues and the health and safety of our people and the public relative to both our culture and activities.
- **Service delivery:** The quality of our service delivery, capital programmes and communication, and the effect on customer experience and trust with the wider community.
- **Supply chain:** The sustainability and resilience of suppliers can be affected by our culture and activities.

The company's principal risks and uncertainties

The most significant group risks represent our principal risks and uncertainties. These reflect the ten highest-ranked risks by exposure (likelihood of occurrence of the event multiplied by the most likely financial impact over the long-term) and those risks that have been assessed as having a significantly high impact, but low likelihood. The heat map diagram opposite provides an indicative view of these risks relative to each other, with the top ten ranking risks labelled 1–10, and those assessed as having high impact, but low likelihood labelled A–D. A summary of the principal risks is provided on pages 55 to 56, with further areas of uncertainty illustrated in the new and emerging risks on page 61.

Eight of the fourteen principal risks have remained relatively stable in the last year with the following principal risks demonstrating a change in exposure:

- **Price Review 2024 outcome:** Increase due to the competing issues of cost effective environmental improvement plans versus keeping bill increases to a minimum.
- **Recycling of biosolids to agriculture:** Increase due to the potential for regulatory change combined with changing climate impeding the availability of, or access to, land.
- **Credit rating:** Increase due to timing difference of investment and associated revenues which may affect financial ratios, and developments in the broader sector which could change rating agency sector risk assessments and related rating thresholds.
- **Capital delivery programme:** Increase due to the challenges associated with delivery of an expected significant capital programme over future asset management plan (AMP) periods.
- **Dam failure:** Increase following the routine cyclical reassessment resulting in the probability of one dam (now subject to enhanced control measure pending capital intervention) influencing the portfolio position.
- **Financial outperformance:** Decreased due to a less volatile inflationary environment as inflation starts to come down following its peak in the prior year.



Risk	Change	Risk	Change
1 Price Review 2024 outcome	Increased	A Dam failure	Increased
2 Failure of the Haweswater Aqueduct	Stable	B Financial outperformance	Decreased
3 Recycling of biosolids to agriculture	Increased	C Terrorism	Stable
4 Credit rating	Increased	D Process safety	Stable
5 Wastewater network failure	Stable		
6 Failure to treat sludge	Stable		
7 Cyber	Stable		
8 Failure to meet the totex efficiency challenge	Stable		
9 Water availability	Stable		
10 Capital delivery programme	Increased		

Change in risk exposure over the year:
- Decreased
- Stable
- Increased

The company's principal risks

1. Price Review 2024 outcome (TCFD)

Risk exposure: Following submission of our business plan to Ofwat, the risk relates to our expenditure allowance, performance incentives and penalties, and the allowable return on investment at the final determination. Risk factors include Ofwat's assessment of the quality and ambition of our plan, including cross-company comparisons of stretching performance and delivery targets alongside efficient costs and alignment to customers' interests.

Control/mitigation: We believe we have presented an ambitious and high quality business plan with comprehensive supporting evidence and justification, and continue to liaise and work closely with Ofwat and other stakeholders.

Assurance: Second line assurance has been provided through a dedicated price review team and a PR24 programme board. There was a blend of internal audit and external assurance focused on the quality of the PR24 business plan and related submissions.

2. Failure of the Haweswater Aqueduct

Risk exposure: The Haweswater Aqueduct is a key asset with current low resilience due to deterioration, with failure potentially resulting in water quality issues and/or supply interruptions to a large proportion of our customer base.

Control/mitigation: A capital project to replace the tunnel sections of the aqueduct has already commenced with the completion in November 2020 of one section. The remaining sections are due to be replaced as part of Haweswater Aqueduct Resilience Programme (HARP).

Assurance: Technical and geological advice and modelling have been sought throughout the programme development, with second line assurance including engineering technical governance. Independent assurance is provided by internal audits and external assurance over the HARP procurement process.

3. Recycling of biosolids to agriculture (TCFD)

Risk exposure: We believe that recycling of biosolids to agriculture is the most practical environmental option, however, a reduction in the agricultural landbank could have significant implications to operations and expenditure into the long term, with a total ban being the worst case scenario. Threats include the quality of biosolids, and changes in, or the interpretation of, regulations.

Control/mitigation: Treatment, sampling and testing ensures that quality standards are met, and we work closely with farmers, landowners and contractors to ensure compliance with regulations. In addition, we work closely with regulators and lawmakers to influence policy from an informed postilion.

Assurance: The bioresources team ensures compliance with the UK Biosolids Assurance Scheme (BAS) and other codes of practice. Second line assurance is undertaken by the assurance team, with third line assurance provided by internal audit, and external auditors certifying our BAS accreditation.

4. Credit rating

Risk exposure: Credit ratings are important for access to capital, meeting regulatory requirements and to give confidence to investors of our financial health. A potential downgrade in credit rating, leading to increased cost of funding, can occur due to: external factors (such as inflation and/or a change in sector risk assessment by a ratings agency); financial and/or operational performance; and a large capital programme which is not matched by equity support where necessary.

Control/mitigation: We continuously monitor financial markets, manage key financial and treasury risks within defined policy parameters, and we will review the capital structure once we have clarity following Ofwat's final determination for Price Review 2024.

Assurance: Second line assurance is provided by financial control and monthly executive performance review meetings, with oversight provided by the treasury committee. The treasury function is subject to regular internal audits.

5. Wastewater network failure (TCFD)

Risk exposure: Our sewer network can fail to operate effectively, resulting in unpermitted storm overflow activations, sewer flooding and environmental damage. Causes include blockages, operational failures or inadequate hydraulic capacity relative to population growth, extreme weather, asset health, and legal/regulatory change.

Control/mitigation: Key preventative measures include proactive maintenance and inspection regimes, customer campaigns and a sewer rehabilitation programme. Sewer network performance is subject to dynamic monitoring, and the Better Rivers programme is improving the capacity of the network.

Assurance: Second line assurance is provided by wholesale assurance, engineering technical governance and the flood review panel. The risk is subject to regular internal audits and external assurance of regulatory reporting.

6. Failure to treat sludge (TCFD)

Risk exposure: Treating sludge to the appropriate quality relates to the capacity of our assets to cope with increasing volume relative to changing demographics, asset health and legislative/regulatory change, such as the Industrial Emissions Directive (IED).

Control/mitigation: We adopt a Throughput, Reliability, Availability and Maintainability (T-RAM) approach for our facilities, balance capacity and demand, undertake regular testing and analysis of sludge, and operate a programme of asset cleaning.

Assurance: Bioresources production planning team provides first line assurance on managing sludge treatment plant performance and capacity. Second line assurance is provided through our internal environmental, regulatory and technical advisers, and assurance team. Third line assurance is undertaken by the internal audit team.

7. Cyber

Risk exposure: There is an increasing and constantly changing cyber threat landscape, with the potential for data and technology assets to be compromised, leading to a major impact to key business processes and operations.

Control/mitigation: Multiple layers of control exist including a secure perimeter, segmented internal network zones, training and access controls. Constant monitoring and forensic response capability also exists.

Assurance: Second line assurance is provided by the security team, which monitors multiple sources of threat intelligence, and the security steering group provides oversight. Independent assurance is provided by annual internal audits and various technical audits, including penetration testing, is regularly undertaken by external specialist.

8. Failure to meet the totex efficiency challenge

Risk exposure: AMP7 totex efficiencies are challenged through a combination of factors including supply chain issues, inflationary pressures, and additional investment to deliver performance improvements.

Control/mitigation: Strategic Portfolio Board (SPB) planning, risk-based investment prioritisation, and the company business planning process all contribute to efficient delivery of services and the capital programme. In addition, there are number of executive-led initiatives to realise efficiency opportunities.

Assurance: First line assurance is undertaken through executive-led meetings, with the strategic portfolio board, and monthly executive performance review meetings providing second line governance and assurance. Third line assurance is undertaken through cyclical internal audits.

Key:
- TCFD Climate-related risk
- Top ten ranking risks relative to likelihood and impact
- High impact, low likelihood risks

Strategic report

The company's principal risks continued

9. Water availability
TCFD

Risk exposure: The availability of raw water is one of the most sensitive risks to climate change. Extended periods of low rainfall and exceptionally hot weather, with accompanying increased customer demand, impacts our water resources, which can result in the need to implement water use restrictions.

Control/mitigation: We produce a Water Resources Management Plan (WRMP) every five years which, based on in-house, industry and regulatory assumptions, forecasts future demand and water availability under repeats of historic droughts, adjusted for climate change. A statutory Drought Plan is also developed every five years setting out the actions we will take in a drought situation.

Assurance: The WRMP and Drought Plan are subject to various second and third line assurance activities prior to publication.

10. Capital delivery programme

Risk exposure: The delivery of the capital programme to time, cost and quality is under constant challenge due to ongoing exposure to natural hazards, and the capacity and capability of third parties and internal resource. This risk will be amplified with the proposed increased size and scale of the capital programme in subsequent AMPs.

Control/mitigation: All projects are subject to planning and project management within a managed programme of capital works. There is a transformation programme in place to ensure readiness of the significant increased capital programme in AMP8.

Assurance: The engineering team provides technical governance and the programme management office (PMO) assures against delivery obligations. The assurance team undertakes health, safety, environmental and quality inspections, and internal audit undertake third line assurance against performance metrics as well as audits of specific projects and programme management.

A. Dam failure
TCFD

Risk exposure: The integrity of dams is fundamental to water storage and the safety of society downstream. Flood damage, overtopping, earthquake or erosion could, in remote circumstances, result in an uncontrolled release of a significant volume of water with catastrophic implications.

Control/mitigation: Each reservoir is regularly inspected by engineers. Where appropriate, risk management activities are applied and risk reduction interventions are implemented through a prioritised investment programme.

Assurance: There are various sources of second line assurance, including supervising engineers, dam safety group, assurance team and regular board reviews. Independent assurance is provided by panel engineers and internal audit.

B. Financial outperformance

Risk exposure: Inflation is fundamental to the economic regulation of the water sector affecting wholesale revenues, regulatory asset values, return on investment, and indexed link debt. Periods of low inflation impact the value of the company and its profitability.

Control/mitigation: The impact of interest rates and inflation is mitigated through hedging and forward buying of commodities such as energy. Business planning, including sensitivity analysis, takes into account ongoing monitoring of markets and regulatory developments.

Assurance: Second line assurance and oversight is provided by the board and treasury committee in addition to monthly executive performance meetings. The risk is also subject to cyclical internal audit reviews.

C. Terrorism

Risk exposure: Terrorism is a threat to our business with terrorist groups looking to advance their political agendas by causing harm and destruction. Although deemed remote, there is a risk to our assets leading to the subsequent loss or contamination of supply and/or pollution of the environment.

Control/mitigation: Assets are protected in accordance with the Security and Emergency Measures Direction (SEMD), and we liaise with the National Protective Security Authority (NPSA), regional counter terrorist units, local agencies, and emergency services.

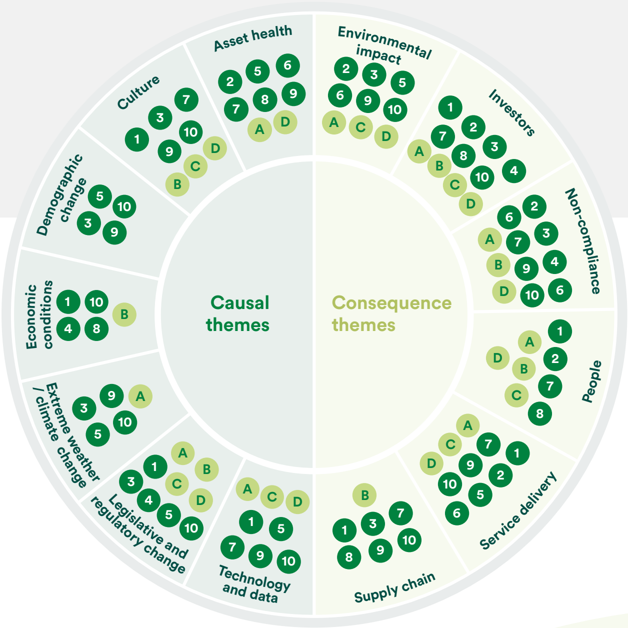
Assurance: Second line assurance is provided by the security steering group. In addition, internal audit undertake cyclical audits with external technical assurance being delivered by specialists.

D. Process safety

Risk exposure: Our activities include processes that are inherently hazardous, with the storage of toxic and explosive gases across multiple sites (two of which fall under the Control of Major Accident Hazard (COMAH) regulations).

Control/mitigation: Multi layers of protection are in place including: design standards; maintenance and operating regimes; work authorisation procedures; and emergency planning and training.

Assurance: Second line assurance is undertaken by both the assurance and health and safety teams, with third line assurance being undertaken through periodic internal audits. The Health and Safety Executive also carries out regulatory inspections.



The wheel diagram illustrates how the principal risks relate to the common causal and consequence themes (as described on pages 53 and 54), demonstrating how new and emerging circumstances associated with the themes can influence the likelihood of a risk event occurring, the impact should the event occur, and the capacity and capability to respond through control/mitigation.

Key:

TCFD Climate-related risk

Top ten ranking risks relative to likelihood and impact

High impact, low likelihood risks

Greener: climate — Our event-based risks most sensitive to climate change

Climate sensitive business risks

The 2020 special report identified six of the circa 100 risks in our business profile as sensitive to climate change. These risks were those that, when applying Met Office projections for 2050 and 2100, using RCP 6.0, experienced a noticeable increase in either likelihood and/or impact. As described on page 53, all business risks undergo review at least twice a year for their current likelihood and impacts taking into consideration the controls in place. The Spring 2024 values for the climate sensitive risks are shown in the table below.

During the coming year, as we prepare our next adaptation progress report, our impact assessments will be revised using updated Met Office projections for different weather characteristics at a seasonal and county level. It is expected more of our business risks will be deemed climate sensitive such as the three risks identified below.

C Chronic physical risk — Changing trends in weather patterns, such as temperatures, sea level and rainfall

A Acute physical risk — Severe weather events, such as storms, heat waves and floods.

T Transitional risk — Associated with move to lower-carbon economy.

Business risks categorised as sensitive to climate change in 2020 special report			2024 risk assessment			Climate sensitivity	
				Impact			
Business risk		Description of climate sensitivity	Likelihood %	Financial £m[2]	Non-financial[3]	Frequency change[4]	Impact change[4]
Water availability	C	Changing seasonal rainfall patterns impact water availability and warmer temperatures intensify supply challenges in dry periods because of evapo-transpiration.	30	198	5 High	↑↑↑	↑↑↑
Failure of wastewater network (sewer flooding)	C A	More frequent and intense storms can overload the wastewater network and lead to severe sewer flooding. Urbanisation makes this worse due to quick runoff from hard surfaces.	40	198	5 High	↑↑	↑↑
Combined sewer overflows[1]	C A	Increased rainfall, together with our significantly higher proportion of combined sewers, is highly likely to exceed the capacity of the combined sewers and lead to storm overflow activations.	50	54	5 High	↑↑	↑↑
Pumping stations and rising mains failure[1]	C A	More frequent and intense storms will increase the likelihood and impact of failures of pumped wastewater systems leading to sewage discharge into the environment or foul flooding.	50	12	4 Medium	↑↑	↑↑
Failure to treat wastewater	A	Extremely heavy rainfall, which is projected to happen more often, can exceed our wastewater treatment works capacity and result in activations of overflows to prevent flooding of assets, streets and homes.	50	60	4 Medium	–	↑
Failure of above ground water and wastewater assets (flooding)	C	Operational sites can be flooded from sea, river or surface water sources. Climate change is expected to increase the likelihood of flooding due to average winter rainfall being projected to rise, frequent storm events and rising sea levels.	7	76	5 High	↑	↑
Recycling biosolids to agriculture	C	Water logging resulting from more persistent rainfall will limit options for recycling biosolids to land for a greater part of the year. Uncovered sludge stores and stockpiles will be more vulnerable in persistent wet, winter weather, increasing the risk of environmental pollution from runoff.	75	515	5 High	–	↑
Land management	C	Deterioration in land quality due to climate change has both direct and indirect impacts. Hotter, drier summers lead to fire, flood, subsidence and landslip events, which in turn have associated health, safety and environmental impacts.	20	9	3 Medium	↑↑↑	↑↑↑
Other risks likely to be deemed sensitive to climate change in 2024 assessment							
Power loss	A	Greater variation in temperatures and precipitation will cause stresses and strains to the power infrastructure, which combined with more intermittent power sources, will cause more asset failures linked to loss of power.	4		4 Medium	Not yet quantified	
Contamination of raw water sources	C A	Raw water sources can be affected by various events such as flooding, landslides, algal bloom, and faecal and pesticide runoff. It is likely that climate change will increase frequency of such incidents, e.g. storm events, fluctuation of weather (dry and wet) and temperature trends.	50	1	3 Medium	Not yet quantified	
Management of fleet	C T	Operational changes responding to climate change will hasten fleet deterioration. Also constraints/legislation to accelerate net zero transition such as clear air zones may limit life of fossil fuel powered vehicles.	30	3	2 Low	Not yet quantified	

(1) Additional risks previously part of the 'failure of the wastewater network (sewer flooding)' risk that are now considered independently.

(2) Financial impact is valued in £millions, estimated for a 40-year period (2024–2064). The valuation includes impacts on income, capex, opex, interest, tax, penalties, and fines and incorporates inflation.

(3) Non-financial impact to stakeholder perception on scale of 1–8. Stakeholders include customers, regulators, investors, politicians and the media.

(4) Variation due to climate change from 2024 to 2100 in RCP 6.0. – Minimal change ↑ increase, ↑↑ approx two-fold increase ↑↑↑ three-fold increase.

Stock code: UU.

Greener: climate — How we identify, assess and manage climate-related risks and opportunities

TCFD risk management disclosures

a) The company operates a mature risk and resilience framework for the identification, assessment and management of all risks including the threats and variability associated with climate change. We also assess all corporate risks for their sensitivity to climate, see page 57.

b) We manage both physical and transitional climate-related risks in our corporate business risk profile, including five of our ten most significant event-based risks, see pages 55 to 56.

c) Climate change is fully integrated across our overall risk management system with climate change adaptation and mitigation each identified as material themes (see page 57) and extreme weather/climate change noted as a common causal theme of event-based risks.

Climate risk identification and assessment

Our framework for the identification, assessment and management of risks is described on pages 51 to 53. As our services are intrinsically linked to the natural environment many of our business risks could be also considered climate risks. These may be physical risks that impact our operations, assets or resources, or transitional risks associated with the transition to a low-carbon economy, such as evolving policies, regulation and legislation.

We use a variety of approaches to identify and evaluate risks, and tools such as PESTLE, to ensure coverage of the main external influencing factors. When assessing climate-related risks, or the climate sensitivity of business risks, we use complex and detailed models to understand the financial and non-financial impacts forecasted weather patterns will have on water resources, water quality and drainage and wastewater management. In our quantification of risk impacts we recognise that some risk events may happen multiple times so we compare impacts over a long-term, typically 40-year, horizon. This incorporates where interdependencies between climate change and other demographic changes influence the frequency of events as well as the consequences.

Following recognition of climate change as a material issue, a special review of all risks in our business risk profile was carried out in 2020 to ascertain, and publish in annual reports, the risks in our business risk profile that are sensitive to climate change. Understanding longer-term impacts raised the profile of climate change, which enabled the board to consider our appetite and tolerance, choosing to mitigate and control the risks from within existing risk management processes and with the same thresholds for materiality.

Change in likelihood and impacts at 2050 and 2100 were individually estimated for all risks in the group risk profile by applying the Met Office climate projections for RCP 6.0, in which emissions peak around 2080 and average temperatures will have risen to between 3–3.5°C by 2100. Climate sensitive risks were defined as those that their likelihood and/or impact would increase with climate change. For example, where the current risk assessment estimates one weather event every five years but the climate projections predict that this event is likely to happen twice every five years.

The current list of business risks recognised as sensitive to climate change is outlined on page 57.

As well as assessing the climate sensitivity of business risks during preparation of our adaptation progress reports we have reviewed the organisation's resilience to physical outcomes of climate change, such as hotter, drier summers and the impact of transition to a low-emission economy. This identified over 70 climate-related risks and the current profile of these risks is presented on page 35, segmented by TCFD risk category and where the impact would manifest. The most material of these physical and transitional climate risks for each climate trend are listed in a table on page 34 and describes how different climate trends can lead to a variety of business challenges and result in consequences to customers or the environment.

Managing climate-related risks

A significant challenge to business planning and managing risks is the considerable uncertainty and interdependencies associated with complex issues such as climate change, population growth, technology and changing needs. To address this we are maturing our capabilities in long-term and adaptive planning as discussed on page 36.

Our public Water Resources Management Plan (WRMP) and Drainage and Wastewater Management Plan (DWMP) are examples of where adaptive planning is used to shape our plans for the longer term (25 years and beyond), while staying aligned with our short-term needs. In these plans we describe how we have used complex models to test how resilient our services would be against a wide range of plausible and extreme future climates alongside alternative demand scenarios defined by different demographics, economic trends and patterns of water use. By recognising the causes and consequences, and quantifying the likelihood and the severity of impact (both financial and non-financial) should the risk event occur, we are able to prioritise climate-related risks and take proactive and early action to manage these risks and adapt our strategies to improve performance and resilience across key topic areas such as water supply, leakage, sewer flooding and pollution.

Read our adaptation progress report on our website at unitedutilities.com/corporate/responsibility/environment/climate-change

Integration of climate-related risks into our risk management framework

Weather is fundamental to how we deliver water and wastewater services, so climate-related matters are firmly embedded in our overall risk management processes. Climate influences the financial planning across all business horizons and physical and transitional climate risks are considered in the preparation of financial statements – see page 188.

With the exception of the adaptation progress reports, climate-related risks are not differentiated from other risks in any way and are managed in the same way and with the same processes as any other business risk.

By maturing our understanding of risk and uncertainty we are building and maintaining long-term resilience across the corporate, financial and operational structures of the group, including to the challenges of climate change. Our integrated approach together with our multi-capital value framework allows us to also deliver wider environmental and social value in the community and local environment, while managing business risks. For instance, by delivery of green infrastructure solutions to reduce storm overflow spills instead of more traditional built assets.

Greener: nature — How we identify, assess and manage climate-related risks and opportunities

TNFD risk management disclosures

a) Nature-related risks are identified through our horizon scanning activities, natural capital accounting, and land management approaches.

b) We manage identified risks and opportunities in the near term through our business planning process and over the long term through our DWMP and WRMP.

c) Nature is fully integrated in our risk management processes, with many nature-related material themes (see page 29).

The North West environment

The land across the North West comprises rural, urban, and city locations that include moorland, agricultural, forestry, operational, offices and commercial land, which poses many risks and opportunities for us. The natural hazards of wind, rain and temperature contribute to a change in the state of nature, with climate change likely to increase the frequency and intensity of weather events. There are a range of controls in place to manage identified risks and opportunities on our land, such as our land management strategy and environmental framework.

Identifying, assessing, and managing nature-related risks and opportunities

Nature-related risks (physical or transitional) can be defined as potential threats posed to our business that arise from our dependencies and impacts on nature, outlined on page 38. Physical risks result from the degradation of nature and consequential loss of ecosystem services, arising as a result of changes in the biotic and abiotic conditions that support healthy, functioning ecosystems. Transitional risks result from a misalignment of economic factors with actions aimed at protecting, restoring and/or reducing negative impacts on nature. These risks can be prompted by changes in regulation and policy, legal precedent, technology, or investor sentiment.

Short-term and medium-term physical risks at specific locations across the North West are captured on an ongoing basis through our internal asset management systems. Our long-term risks are captured and managed as part of our long-term planning activities such as our Drainage and Wastewater Management Plan (DWMP) and Water Resources Management Plan (WRMP), which look over a 25-year time horizon and are reviewed every five years.

Once our material risks are identified, we evaluate our operational and strategic dependencies and impacts over short-term (one year), medium-term (up to 2030), and long-term (beyond 2030) time horizons. These risks are then monitored through our business risk management processes, as outlined on page 51.

Activities in our supply chain are primarily supported by our responsible sourcing principles, which support our supply chain partners in identifying and managing risks and opportunities relating to the environment. A future focus for our nature-related financial disclosures is to further review our upstream risks and opportunities.

Healthier — How we identify, assess and manage material risks and opportunities affecting our ability to create a healthier North West

Customer service and operational performance, including drinking water quality

Being so fundamental to our day-to-day service, these themes permeate a variety of our top risks. Several of our inherent risk areas are part of customer service and operational performance, including water service, wastewater service, retail and commercial, and supply chain and programme delivery. Others can also have an impact on our performance, including resources, finance, environmental, security, and political and regulatory.

Seven of our top ten event-based risks are directly linked to these material themes:

- Failure of the Haweswater Aqueduct
- Recycling of biosolids to agriculture
- Wastewater network failure
- Failure to treat sludge
- Cyber
- Failure to meet the totex efficiency challenge
- Water availability

Drinking water quality is particularly impacted by the risks around failure of the Haweswater Aqueduct and water availability.

The outcome of the 2024 price review (our top event-based risk) will also be important in supporting how we manage service opposite these themes in AMP8. High impact but low likelihood risks around dam failure, terrorism, and process safety also have potentially significant impacts on this theme.

Risk management is embedded fully into organisation-wide processes given the fundamental nature of this to everything that we do. Detail on the risk exposure, controls/mitigation, and assurance in relation to each of these top risks can be found on pages 54 to 56.

Affordability and vulnerability

Retail and commercial is one of our inherent risk areas, and this incorporates a number of underpinning event-based risks that sit outside of our top ten. These include customer experience, cash collection, billing accuracy, and affordability support, which collectively take account of economic conditions including cost-of-living pressures, providing value for money, and supporting our most vulnerable customers. The impact of affordability and vulnerability is also a factor in our top ten event-based risk of failure to meet the totex efficiency challenge.

In order to achieve high levels of performance, our customer experience and debt strategy includes multiple controls, including customer consultation and surveys, affordability schemes, tariff setting policies, and reconciliation processes.

Our AMP8 business plan envisages significant increases in bills to support the investment needed, but we also propose doubling the value of the affordability support schemes we offer for customers struggling to pay their bill, which would see us helping one in six households during the 2025–30 period. The outcome of the 2024 price review (our top event-based risk) will, therefore, have a significant impact on this theme going forward.

Healthier — How we identify, assess and manage material risks and opportunities affecting our ability to create a healthier North West continued

Health, safety and wellbeing
Health and safety is one of our inherent risk areas, and we have an averse appetite and tolerance in this area. Our event-based risks can be categorised into three types: personal safety; process safety; and health and wellbeing. These represent all the key hazards, both from a severity and frequency basis, and include occupational health and mental health. One of our high impact but low likelihood risks, process safety, also has the potential to significantly impact this theme.

Details on our risk exposure, controls/mitigation, and assurance in relation to the top risks can be found on pages 54 to 56.

Mitigation includes our health, safety and wellbeing culture, which is built upon six key principles: active leadership; engaged, empowered colleagues; clear expectations; safe, healthy working environments; simple effective systems; and continuous improvement.

Diverse and skilled workforce
Our resources inherent risk area includes human resources which, in turn, includes the specific risks of talent, recruitment and selection, employee relations, and pay and reward.

Equity, diversity and inclusion (ED&I) is a common theme across these risks. Having a diverse and inclusive workforce is important to ensure we have access to a wide range of ideas and views and to maximise colleague engagement.

A diverse, engaged and skilled workforce is important in managing a number of other risks. For instance:

- Price review 2024 outcome – our colleagues have been heavily involved in the preparation of a high-quality and ambitious plan, helping us to secure a positive outcome, and they will also be fundamental to successful delivery of the plan once we receive the final determination.
- Totex efficiency challenge – ensuring all colleagues are focused on efficient ways of working helps enable us to deliver the best value for money and strong totex efficiency. The new 'Call it Out' initiative gives colleagues an opportunity to raise ideas for cost-saving and other improvements directly with the CEO so the best suggestions from right across our diverse and skilled workforce can be actioned quickly and effectively.
- Cyber – we rely on our colleagues being cyber safe to help protect our network from attempted attacks. Therefore, ensuring everyone working for us is appropriately trained and skilled in how to spot and avoid these attempts is very important to ensuring our assets are safe from cyber attacks.
- Process safety – ensuring our colleagues are appropriately skilled is particularly important when dealing with inherently hazardous processes.

Stronger — How we identify, assess and manage material risks and opportunities affecting our ability to create a stronger North West

Cyber security
Security is one of our ten inherent risk areas and cyber is identified as one of our top ten event-based risks. We have a low risk appetite in this area, and to date have not experienced a material breach in our IT security. We undertake a number of mitigating actions, including:

- Enhanced physical security measures to counter general criminality and potential terrorism as appropriate.
- We monitor and review alerts and guidance issued by the NCSC and the US Cybersecurity and Infrastructure Security Agency, and implement new security technologies where needed to address growing threats, such as upgrades to our firewalls and multi-factor authentication to access our systems. We maintain strong information sharing links with the broader UK water industry, security partners and vendors, and the wider information security community.
- We have a structured security policy framework including detailed guidance to allow all users, administrators and moderators to operate within a clearly communicated, best practice ruleset. Internal audits are regularly carried out to ensure compliance is maintained.
- Colleague training, including mandatory 'Security Seven' training, cyber incident training, and enhanced training for incident first responders. We improve colleague awareness with regular cyber incident response exercises, phishing tests and associated training, as well as running regular cyber-related events. We retain a dedicated, third-party cyber incident responder to be deployed in the event of a major cyber incident.
- Our cyber security incident response plan is incorporated into business continuity and incident management plans and processes, and we have a dedicated business-wide cyber security incident response team. Our incident response plans are regularly tested using independent incident exercise providers, ensuring our teams are prepared for all the most likely cyber incident scenarios.
- Strong, independent assurance, including a continuous annual schedule of penetration testing, red team exercises for both physical and cyber and regulatory audits against our operational assets, and independent assurance and guidance against our regulatory security commitments as part of our annual security assessments. We have a comprehensive supply chain security assurance process, and work with suppliers to help them reach the required security level where needed.

Financial risk management
Finance is one of our inherent risk areas, credit ratings is one of our top ten event-based risks, and financial outperformance is one of our high impact but low likelihood risks. The controls we have in place through our financial risk management policies and processes provide a high degree of mitigation and protection from market volatility, enabling us to raise finance across the economic cycle. Our debt has a long average life and maturities are spread to avoid a high concentration of risk in any one year. We monitor financial ratios regularly as well as considering the impact on these metrics within our business planning processes.

Supporting communities
The scale of our AMP8 business plan means community engagement and support will be more important than ever, so this theme plays into several of our inherent risk areas – water service, wastewater service, and supply chain and programme delivery. It is also a key driver in enabling successful delivery of our AMP8 business plan, with its individual county plans. Our county delivery squad structure and dedicated stakeholder managers will be key to managing associated risks.

New and emerging risks and opportunities

We define new risks as those that have not previously been apparent and are expected to have long-term implications for the group and/or sector. We consider emerging risks to be those that are growing, developing, becoming more apparent or prominent. The emerging status of a risk can, therefore, relate to either newly established or existing risks. Horizon scanning activity is a key feature of the risk and resilience framework. It is undertaken routinely as part of external research and benchmarking, the assessment of event-based risks, and through dedicated forums such as the new and emerging risk forum and the compliance working group. Where there are high levels of uncertainty, or the circumstances are too complex to quantify, we classify and retain new and emerging risks as watching briefs. Where there is more understanding, assumptions can be applied to the assessment of causal factors, consequences, and control effectiveness, which will be reflected in the quantification of the likelihood and/or impact. Recent assessments of new and emerging risks can be categorised into two areas, namely: geopolitical environment; and political, regulatory and legal.

Geopolitical environment: Geopolitical issues continue to emerge with hostilities around the world changing the security landscape and threatening supply chain resilience.

- **Cyber:** There is a steady growth in cyber incidents globally with increased sophistication and approaches by which attacks are enacted. Ongoing geopolitical tensions compound the issue with Russian state sponsored actors targeting western countries, and pro-Palestinian/Iranian attackers targeting those they believe are supportive of Israel's posture. This constantly changing threat landscape requires continuous updates in cyber security measures and further development of our business continuity plans.
- **Scarcity of goods and services:** The outbreak of war in the Middle East and related hostilities, coupled with the existing war in Ukraine and tensions between America and China over Taiwan, continues to affect the supply and demand of operational, construction and technology goods. As a result, we are now reducing reliance on global supply chains, placing greater focus on UK suppliers, and encouraging suppliers to increase resilience.
- **Energy resilience:** There is an increasing external threat of planned and unplanned outages, and supply voltage quality issues that could affect technological and operational assets. As a result we continue to increase our self sufficiency and work closely with Electricity North West regarding outages.

Political, regulatory and legal: Increased public and political interest in the water sector and changes to societal expectations is leading to a number of developments.

- **Reputation and scrutiny:** The sector continues to be under significant scrutiny, linked to issues arising from storm overflows, proposed bill increases and other water companies being under financial stress. These reputational issues add to ongoing criticism of the sector and existing concerns over sector legitimacy. While our high quality and ambitious business plan and improving environmental performance are positive mitigation against direct regulatory action, overall sector performance and risk of contagion continues to emerge and remains a concern. These challenges could potentially lead to a change in sector risk assessment by a credit ratings agency, and a credit rating downgrade, the effect of which would be an increase in the cost of debt over the long term and lower financial outperformance.
- **Plastics and forever chemicals:** There is increased attention on single-use plastic, microplastic (plastics less than 5mm) and perfluoroalkyl and polyfluoroalkyl substances (PFAS) commonly known as 'forever chemicals', with their presence in the environment being linked to the water cycle.
- **Capacity and capability:** Whilst our transformation and strategic programmes team are coordinating preparations, and our new county model focuses on stakeholder relationships, emerging risk factors associated with the significant planned investment programme include: the suitability of technology and information; skill sets and efficient ways of working; and partner arrangements. The availability of goods and services may also be impacted by the size and scale of our capital programme relative to competition with the water sector and other industries for limited resources. In addition, whilst underlying credit quality is not a concern, the additional spend could result in timing mismatches affecting financial ratios and thresholds which could lead to a credit rating downturn, an increase in the cost of debt, and low financial outperformance.

Material litigation

The group robustly defends litigation where appropriate and seeks to minimise its exposure by establishing provisions and seeking recovery wherever possible. Litigation of a material nature is regularly reported to the group board. While our directors remain of the opinion that the likelihood of a material adverse impact on the group's financial position is remote, based on the facts currently known to us and the provisions in our financial statements, the following three cases are worthy of note:

- In relation to the Manchester Ship Canal Company matter reported in previous years, a hearing was held in the Court of Appeal in 2022 and the main additional points raised by MSCC were dismissed, although MSCC were granted leave to appeal to the Supreme Court. The final appeal was heard in early March 2023 and the Court's decision is awaited. This may provide further clarity in relation to the rights and remedies afforded to the parties and others in relation to discharges by water companies into the canal and other watercourses.
- As reported in previous years, in February 2009, United Utilities International Limited (UUIL) was served with notice of a multiparty 'class action' in Argentina related to the issuance and payment default of a US$230 million bond by Inversora Eléctrica de Buenos Aires S.A. (IEBA), an Argentine project company set up to purchase one of the Argentine electricity distribution networks that was privatised in 1997. UUIL had a 45 per cent shareholding in IEBA, which it sold in 2005. The claim is for a non-quantified amount of unspecified damages and purports to be pursued on behalf of unidentified consumer bondholders in IEBA. The Argentine Court has scheduled various hearings to receive the testimony of fact witnesses and experts (starting in May 2023 and ongoing). UUIL will vigorously resist the proceedings given the robust defences that UUIL has been advised that it has on procedural and substantive grounds.
- Collective proceedings in the Competition Appeal Tribunal (CAT) were issued on 8 December 2023 against UUW and United Utilities Group PLC on behalf of approximately 5.6 million domestic customers following an application by the Proposed Class Representative, Professor Carolyn Roberts. It is alleged that customers have collectively paid an overcharge for sewerage services during the claim period (which runs from 1 April 2020 and may continue into the early years of the PR24 period) as a result of UUW allegedly abusing a dominant position by allegedly providing misleading information to regulatory bodies. A hearing is currently scheduled in late September 2024 to deal with certification of the claim and any possible preliminary issue or strike out arguments in respect of the claim. UUW believes the claim is without merit and will defend it robustly. Similar claims have also been issued and served against five other water and wastewater companies.

Performance metrics

Our key performance indicators

We measure our performance against a selection of key performance indicators (KPIs), both operational and financial.

Our operational KPIs are aligned with our purpose and strategic priorities, which also provides alignment with environmental, social and governance (ESG) matters. KPIs for each element of our purpose – stronger, greener and healthier – can be found in the relevant sections of our operational performance on pages 68, 78 and 84.

Our financial KPIs assess both profitability and financial resilience, including income statement, balance sheet and shareholder performance metrics. More detail on these can be seen on page 90.

Bonuses (for all colleagues) and long-term incentives (for senior leaders and executive directors) are closely aligned to many of our operational and financial KPIs.

Our other performance indicators

Our operational and financial KPIs are by no means the only measures by which we monitor and assess our performance. We report on a range of material ESG measures across our operational performance section on pages 72, 82 and 88, with consideration to what stakeholders tell us matters most, as well as our contribution to wider value and global goals such as the UN SDGs and climate change mitigation goals.

These measures relate to all activities undertaken by the group unless stated otherwise in the performance tables, in which case they relate solely to the water and wastewater activities of our regulated entity, United Utilities Water Limited.

We also disclose our latest performance on ESG measures on our website at **unitedutilities.com/corporate/responsibility/our-approach**

Assurance of performance metrics

All these performance indicators have received an appropriate level of assurance, such as independent third-party verification, regulatory reporting assurance processes, or through our own internal audit team. The performance tables on pages 68 to 88 state what nature of assurance has been obtained for each metric, and the sections of this report that have received external limited assurance are marked as such on the relevant pages, including the figures in our energy and carbon report and our remuneration report. These audit opinions can be found on our website at **unitedutilities.com/corporate/responsibility/our-approach/esg-performance**

Benchmarking our ESG performance

We measure ourselves against national and international benchmarks of responsible business practice, and align ourselves to recognised management standards and accreditations to give confidence in the way we are operating.

We actively participate in a range of global ESG ratings, indices and frameworks to benchmark our approach against best practice and emerging sustainability challenges, and our performance against a suite of trusted indices is one of our operational KPIs. Our strong consistent performance against these external benchmarks demonstrates our commitment to operating in a responsible manner.

Read more about our **performance against these ratings and indices** on pages 86 and 87

Many of the ESG indices draw their data from this report. We collate, monitor and report publicly on a wide range of performance measures across ESG categories. In addition to the wealth of ESG disclosures and performance data throughout this report, the following paragraphs indicate where further information on certain frameworks can be found.

World Economic Forum (WEF) International Business Council (IBC)

The WEF IBC has proposed a set of common metrics for the consistent reporting of sustainable value creation in mainstream annual reports. We already integrate many of these metrics in our integrated annual report and to make this easier for those searching for the information we have collated them into one place on our website.

Read more on our website at **unitedutilities.com/corporate/responsibility/our-approach/cr-reporting/wef**

Sustainability Accounting Standards Board (SASB)

SASB standards aim to standardise disclosure of material sustainability information mainly for companies based in the United States. As many of our shareholders are located in North America we publish comparable SASB data on our corporate website. This covers the main SASB data points for the water utilities industry, of which we are a part.

Read more on our website at **unitedutilities.com/corporate/responsibility/our-approach/cr-reporting/sasb**

In this section you will find:

- Some of the ways we monitor and benchmark operational and financial performance, and our assurance over those metrics
- Supplementary documents and where to find additional performance information
- A selection of key future targets over the short, medium and long term
- Metrics and targets used to assess and monitor climate-related, nature-related and other material themes

Annual performance report (APR)

Performance against our regulatory contract is monitored and assessed each year, and reported within the annual performance report (APR), as required by our economic regulator Ofwat. We include several regulatory performance measures within this integrated annual report but our APR (published in July of each year) provides greater detail, as well as further narrative, about our regulatory performance during the year and cumulatively across the AMP.

There is financial information contained within the APR, which relates only to the regulated company, United Utilities Water Limited, and its appointed activities, and is calculated in accordance with the regulatory accounting framework. This differs from IFRS reporting, and a reconciliation to IFRS reporting is provided in the APR.

For the purposes of clarification, our financial KPIs relate to performance at the group level, and are calculated within the definitions given in this report.

Our previous year APRs are available on our website, and the APR for 2023/24 will be published by 15 July 2024.

Our annual performance report will be available from 15 July at **unitedutilities.com/corporate/about-us/performance/annual-performance-report**

Metrics and targets

Future targets

This page sets out some of the future targets we have set ourselves over the short, medium and long term in relation to the three key elements of our purpose

Short term	Medium term	Long term
2025 Greener: nature — Improve water quality in 1,315 kilometres of rivers across the North West	2025 Stronger — 100 per cent of targeted suppliers signed up to United Supply Chain	2025 Healthier — >220,000 customers registered for our Priority Services scheme
2030 Greener: climate — Restore 1,000 hectares of peatland and create 550 hectares of woodland	2028 Greener: climate — 100 per cent of our fleet to be green	2025+ Greener: climate — Work to enable future national water trading
2030 Greener: climate — Absolute greenhouse gas emissions reductions targets	2030 Greener: nature — Improve 437 storm overflows and reduce spills by 60 per cent	2030 Healthier — 50 per cent female executives and their direct reports
2050 Greener: nature — Help reduce water demand to 110 litres per person per day	2050 Greener: climate — Net zero GHG emissions aligned to the Paris Agreement and Net Zero Standard	2045 Stronger — Install additional water meters to achieve coverage of around 75 per cent of households
2050 Greener: nature — Reduce leakage by 50 per cent	2050 Greener: nature — Reduce to an average of no more than ten spills per storm overflow	2070 Healthier — Eliminate lead pipes in customers' homes

Greener: climate — Metrics and targets used to assess relevant climate-related risks and opportunities

TCFD metrics and targets disclosures

a) We track both physical and transitional metrics to assess climate-related risk and opportunities. We also consider some of our environmental KPIs as key to understanding our resilience to climate change and monitor accordingly.

b) We disclose our GHG emissions and underlying energy use for 2023/24 in our energy and carbon report on pages 75 to 77.

c) Our key climate-related targets are our six carbon pledges and our four near-term science-based targets. Our progress against them is summarised on page 74. Other climate-related targets and performance against them can be found on page 72.

Our vulnerability to climate-related risks is determined by both the physical and transitional impacts we experience and the control measures we have put in place to manage the risks and realise opportunities.

Metrics to monitor risks

Physical risks

As a water company, weather metrics (and forecasts) are vital inputs into our day-to-day operational planning. Rainfall volume, intensity and location direction impact the demands on water resources, wastewater and bioresources functions. To manage this we track recent and historic patterns of weather and weather events and use the data to continually improve our understanding of how different patterns can affect demand and our ability to deliver our services. We use both short-term forecasts and longer-term projections from the Met Office, and for the long-term plan for up to a 4°C change in global temperature.

Transitional risks

We horizon scan for changes relating to transitional risks across technology, policy and legal, markets and expectations of our stakeholders. Topics include looking for technologies to measure and reduce process and fugitive emissions, government policy changes and developments, energy pricing fluctuations (of both fossil fuels and low-carbon alternatives), and the developing market (availability and cost) of alternative fuelled vehicles, batteries.

Carbon pricing is an important topic and we track closely the costs of purchasable credits, offsets and energy attribute certificates. For medium and long-term risk and benefits assessments (such as our AMP8 business plan) we use the UK Government carbon values 'for use in policy appraisal' for the relevant year to convert GHG emissions to a financial value, e.g. £130 per tCO_2e for 2030.

Opportunities

As a regulated business, climate-related opportunities are limited to ways we can avoid costs, rather than generate revenue. For example, our strategy to increase renewable energy generation is primarily focused on reducing costs to buy electricity rather to export more and generate revenue.

Read more about environmental performance and remuneration from page 72

Performance metrics and targets

Environmental KPIs

We manage our climate-related risks by putting in place controls such as those as set out on page 85 to 89 and in Appendix A.3 of the 2021 climate change adaptation report, published on our corporate website. The effectiveness of these controls is seen in our operational performance metrics. The following environmental KPIs are recognised as climate-related performance metrics and are reported on page 72:

- Leakage reduction;
- Per capita consumption;
- Flooding incidents, risk and resilience;
- Storm overflow activations;
- Risk of severe restrictions in a drought;
- Sewer collapses;
- Water service supply and resilience; and
- Low water pressure areas.

Science-based emissions targets

We have a strong track record of playing our part to mitigate climate change and have reduced scope 1 and 2 emissions by over 70 per cent since 2005/06, largely through our substantial investment in renewable power generation and green electricity procurement.

Our ambition and commitments are based on international guidance and climate science and our four near-term science-based targets were verified by the Science Based Targets initiative (SBTi) in July 2021. The SBTi Net Zero Standard was launched in late 2021 and we have submitted our long-term net zero target for validation in January 2024. We plan to review and, if needed, revise our near-term science-based targets in 2025 as per the SBTi guidance and also aligned with the next business planning period.

Performance and remuneration

Climate-related environmental KPIs and targets influence remuneration. Bonuses for all colleagues are linked to the company scorecard (see page 143) and the long-term incentive plans for senior leaders and executive directors, for periods ending 2025 and 2026, include measures directly linked to our carbon pledges and clean energy strategy.

Read about progress to deliver our six carbon pledges on page 74

Read our energy and carbon report including 2023/24 greenhouse gas emissions on pages 75 to 77

Read about reward for environmental related performance on pages 140 to 149

SBT1 Scope 1 + 2 Absolute emission reduction

42% reduction in absolute scope 1 and 2 emissions by 2030

SBT2 Scope 2 Renewable electricity purchase

100% purchased electricity each year is renewable by 2023

NEAR-TERM SCIENCE-BASED TARGETS — NET ZERO 2050 — TOWARDS OUR LONG-TERM AMBITION

SBT3 Scope 3 Construction supplier engagement

66% of construction suppliers (by emissions) have SBTs by 2025

SBT4 Scope 3 Absolute emissions reduction (excl cat 2)

25% reduction in scope 3 emissions (excl capital goods) by 2030

SCIENCE BASED TARGETS — DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Stock code: UU.

Metrics and targets

Greener: nature — Metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities

TNFD metrics and targets disclosures

a) We disclose below the nature-related metrics currently used to drive internal decision-making.

b) Many of the short, medium, and long-term nature-related targets align with regulatory expectations.

c) Performance against our environmental KPIs can be found on page 68, and against other environmental metrics on page 72.

We monitor a wide variety of metrics and set targets to help monitor and assess nature-related risks and opportunities. In our disclosures, we have focused on metrics and targets that we currently use to drive internal business decisions. Moving forward we intend to develop our disclosures to more closely align with the TNFD's 14 core global indicators, to support comparable decision-useful information for report users. Several of our targets align with a number of Global Biodiversity Framework (GBF) long-term goals and targets for 2050, for improving biodiversity and transitioning to a nature positive economy. To measure our performance, we demonstrate delivery against contributing targets from a number of statutory requirements, such as the condition of protected sites, biodiversity net gain, and environmental performance. We set a natural capital performance commitment, with related outcome delivery incentive (ODI), in our business plan for 2020–25. This is measured by demonstrating additional value created through ecosystem services for customers and the environment. We achieve this by implementing nature-based solutions where they offer best value compared to a hard-engineered solution. In 2023, we updated our corporate natural capital account, to assess the extent and value of the benefits our land provides to us and the rest of society. As we update our account in future, we can track changes to our natural assets and quantify improvements from our investments.

Storm overflows and river water quality

Many of our targets in the short and medium term are regulatory performance commitments for AMP7 and proposed in our AMP8 business plan. We also have targets that go further, like our Better Rivers pledges and targets for monitoring and reducing spills from storm overflows. Our longer-term targets, as part of our long-term delivery strategy, align with regulatory expectations. We are committed to improving surface, groundwater, and bathing water quality in the immediate term and beyond.

Risks and opportunities	Metric and indicators
Land use change	• Extent of terrestrial and freshwater habitat change, measured by total land cover area (hectares).
Natural capital and biodiversity	• Condition of our priority locations: Sites of Special Scientific Interest (hectares).
Invasive species	• Record the presence of invasive plant species and monitor the number of non-native animal species on our land (number).
Water	• Number of pollution incidents. • Percentage reduction in leakage. • Number of flooding incidents.
Recycling biosolids	• Tonnes of biosolids removed.

Risks and opportunities	Targets and progress
Water	• To monitor all storm overflows by 2023. • To improve water quality in 1,315 kilometres of rivers across the North West by 2025. • Reduce spills from more than 400 overflows by 2030. • To protect and enhance over 500 kilometres of rivers by 2050. • 25 per cent reduction in the number of pollution incidents by 2050. • Reduce leakage by 50 per cent by 2050. • Reduce to an average of no more than ten spills per storm overflow by 2050. Invest £230 million in environmental improvements during AMP7, supporting at least a one-third sustainable reduction in the number of spills recorded from our storm overflows by 2025 compared to the 2020 baseline. **Progress** – There are over 2,200 storm overflows in the North West, and all are now monitored. We have committed to reinvest £250 million of our AMP7 outperformance to deliver improved environmental outcomes, including accelerating our Better Rivers programme. We have proposed a £3.1 billion investment in our AMP8 business plan to deliver further reductions in spills from storm overflows, and a £900 million investment to reduce nutrients. We've installed over 72,000 sensors on our pipe network that listen for leaks. Our proposed water resources management plan meets government policy to halve the level of leaks and to reduce water use per person per day to 110 litres by 2050.
Natural capital and biodiversity	• To achieve 100 per cent favourable or recovering condition for SSSI locations, improving 11,500 hectares of SSSI to enhance biodiversity by 2030. • Protect and enhance rural environments and adapt to the challenges of climate change by 2050. **Progress** – 91 per cent of SSSIs on our land now meet 'favourable' or 'unfavourable recovering condition' status. We have mapped out the extent and condition of our land via our 2023 Corporate Natural Capital Account.
Invasive species	• To remove invasive plant species and promote the growth of native plant and animal species by 2050. **Progress** – We continue to remove non-native and invasive species, such as giant hogweed. Our River Rangers are helping to spread information on how to prevent the spread of invasive non-native species.
Recycling biosolids	• To reduce the amount of waste material going to landfill because of our production process by 2050. **Progress** – Delivering biosolids for over 17,000 hectares of land every year across 1,500 farms.

Healthier — Metrics and targets to monitor and assess delivery of the 'healthier' ambition in our purpose

Customer service and operational performance, including drinking water quality

We have a number of performance commitments with associated customer outcome delivery incentives (ODIs), through which we monitor and assess operational performance for customers and the environment. These set ambitious targets for performance each year, and rewards and/or penalties for over/underperformance against those targets. This includes Ofwat's measure of customer satisfaction, C-MeX, which is one of our KPIs, and water quality metrics.

We monitor individual performance and overall net rewards/penalties, as well as other metrics of operational performance outside of our regulatory performance commitments. Many of these measures are included in this report, and fuller commentary and outcomes related to our regulatory performance commitments can be found in our APR each year.

Affordability and vulnerability

We monitor metrics including cash collection, bad debt, and the number of customers on our support schemes. Our C-MeX score for customer satisfaction is impacted in part by the help we provide to customers in vulnerable situations. We have performance commitments with FY25 targets for lifting customers out of water poverty (which is one of our KPIs) and signing more customers up to Priority Services, and we have set ambitious targets in our AMP8 business plan to double affordability support, supporting one in six customers in 2025–30.

Health, safety and wellbeing

We monitor various metrics including accidents and near misses, and health, safety and wellbeing is one of the things we assess in our annual colleague opinion survey. We target reductions in significant incidents and injuries, whilst ensuring the correct levels of training and competency, and we have targets for accident frequency rates for both colleagues and contractors. Our overarching aim is that every person working for us or on our behalf goes home safe and well. We also monitor programmes to maintain accreditation with the Workplace Wellbeing Charter.

One of the most important ways to protect colleague safety is to ensure they are properly trained. Recognising this, we have implemented a rule that colleagues must remain in certification on all mandatory training throughout the year to be eligible for the annual bonus. We monitor this regularly and report monthly on any colleagues out of certification.

Diverse and skilled workforce

We monitor metrics on the inclusive nature of our workforce, including gender, ethnicity, disability, social mobility and LGBT+. We target scoring at least in line with both the UK norm and the utilities norm on the diversity and inclusion questions in our colleague engagement survey, and we seek to make progress towards improving our diversity statistics, including closing the gender pay gap.

In 2023, we published our very first equity, diversity and inclusion report, detailing the progress we have made and our commitments and plans to go further still. We have set long-term measurable and actionable ambitions for equity, diversity and inclusion, with a short-term action plan highlighting the areas of focus for the next financial year.

By 2027	
5%	Ethnic minority – executive and direct reports
By 2030	
5.4%	Ethnic minority – total workforce
40%	Females – total workforce
44%	Females on the board
50%	Female executives
50%	Female direct reports to executive

Our goals are focused initially on prioritising gender and ethnicity, but we also remain focused on fully supporting candidates and colleagues from all characteristics and social background.

Colleague training is monitored through a training and development portal, and they receive frequent reminders when they are due to come out of certification and need to undertake any refresher or new training, as well as giving them access to a wide range of training courses.

Stronger — Metrics and targets to monitor and assess delivery of the 'stronger' ambition in our purpose

Cyber security

We monitor a number of security metrics and have targets against each. Many are aimed at meeting or exceeding national recommendations or comparative performance, such as targets for security patching recommended by the National Cyber Security Centre, and our phishing test platform where we monitor comparative performance on clicks, compromises and reports.

We target (and achieve) zero malware outbreaks and use a series of technical and process controls to ensure we achieve this. We aim to have all our major suppliers security assured to our standards, and maintain a dynamic and live assessment of our supply chain through dedicated assessment tools and resources.

We are measured annually by our regulators against NIS security targets and have remained compliant since this was introduced. As a tier two PCI-DSS merchant, we are measured annually by our payment industry stakeholder against PCI-DSS and have remained compliant to requirements for many years.

Financial risk management

We operate within targets set out in our financial risk management policies, including a range for how many months' liquidity we maintain on a rolling basis, levels of index-linked and fixed rate debt as a percentage of net debt that we want to maintain, and energy price hedging. We set individual credit risk targets for counterparties based on their level of risk to ensure we are not over-exposed to any counterparty. We target a 55 to 65 per cent gearing range, which supports our credit rating targets.

Performance against all of these targets is monitored on a monthly basis through management information updates, with more detailed analysis provided quarterly. We also monitor and forecast performance against financial covenants to ensure these will not be breached.

Supporting communities

Community investment is one of our KPIs, with a target to increase our investment by ten per cent in AMP7 compared with the average over AMP5 and AMP6.

We also monitor other community support metrics, such as the number of children benefitting from our education materials.

Our AMP8 business plan has ambitious targets for what we will deliver for each of the five counties in our region, setting out how we will go even further to support these communities in 2025–30.